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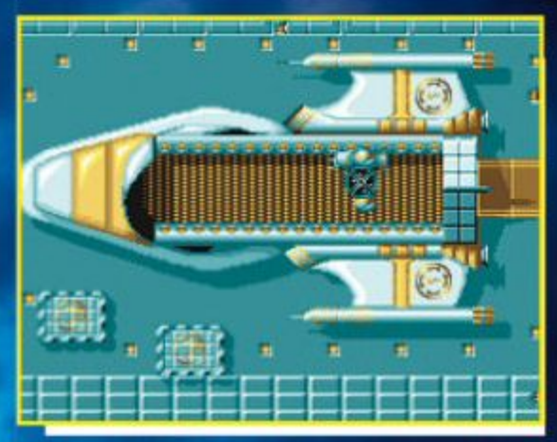

THE EVOLUTION OF PARADROID

ANDREW BRAYBROOK ON WHAT INSPIRED HIS CEREBRAL BLASTER

THE MAKING OF ZERO TOLERANCE

BEHIND THE SCENES OF THE MEGA DRIVE'S AMBITIOUS FPS

MY ARCADE® PAC-MAN OFFER

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ALEX KIDD IN SHINOBI WORLD

EXAMINING THE MASTER SYSTEM'S BEST CROSSOVER

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MORTAL KOMBAT

ED BOON ON KILLER KHARACTERS, GUTS AND GLORY, AND FATAL FINISHERS

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THE RETROBATES

WHAT'S YOUR FAVOURITE MORTAL KOMBAT FATALITY?

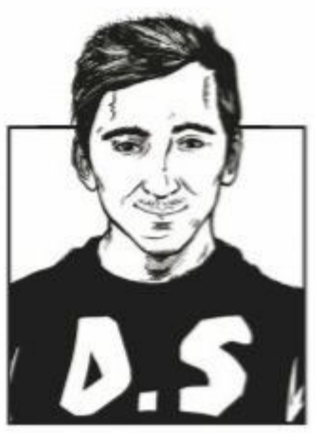
DARRAN JONES

It's not technically a Fatality, but Stryker's Animality from Mortal Kombat III is amazing. He turns into a tyrannosaurus and bites his opponent in half.

Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine

Currently playing:
Guardian Heroes

Favourite game of all time:
Strider



DREW SLEEP

I quite like the one from MKX where Johnny Cage rips a hole in his opponent and yells 'HERE'S JOHNNY' through the gap in an homage to Jack Nicholson in The Shining.

Expertise:
Minimal water damage

Currently playing:
Uncharted 4: A Thief's End

Favourite game of all time:
Final Fantasy VIII

NICK THORPE

Sub-Zero's Mortal Kombat 2011 one, where he freezes his opponent, rips out the skull and spinal cord and then uses those to shatter the rest of the body. Great spin on a classic.

Expertise:
Owning five Master Systems (I sold two)

Currently playing:
Robocop Versus The Terminator

Favourite game of all time:
Sonic The Hedgehog

WOZ BROWN

Raiden's head-popping Emperor impression.

Expertise:
Tracking down Windows 98 drivers

Currently playing:
Unreal Tournament '99

Favourite game of all time:
The Legend Of Zelda: Ocarina Of Time

GRAEME MASON

I remember seeing Johnny Cage's head punch decaptitation and thinking, 'Wow did that really just happen?' You never forget your first fatality!

Expertise:
Adjusting the tape azimuth with a screwdriver

Currently playing:
Uncharted 3: Drake's Deception

Favourite game of all time:
Resident Evil 4

ANDREW FISHER

Kung Lao slicing someone in half with his hat.

Expertise:
Over 35 years of gaming, from Commodore 64 to Wii U

Currently playing:
Dicey Dungeons

Favourite game of all time:
Wizball

PAUL DRURY

I like Kung Lao's 'split them right down the middle' hat trick, though I was more of a 'Friendship' finisher fan myself #peace.

Expertise:
Videogame quizzes

Currently playing:
Spacewar!

Favourite game of all time:
Sheep In Space

PAUL WALKER-EMIG

I'm a fan of the sillier Fatalities, so I'll plump for Kabal's Soul Scream from Ultimate Mortal Kombat 3 where his big stupid head puffs up and he literally screams the soul out of his opponent's body.

Expertise:
Pretentious indie games

Currently playing:
Baba Is You

Favourite game of all time:
Metal Gear Solid

RORY MILNE

I'm not keen on gore, so I'll go for Sub-Zero's MKII 'Ice Shatter' deathblow. For some reason, frozen blood and guts just don't seem as disturbing.

Expertise:
The game that I'm writing about at the time of writing

Currently playing:
Robocop 2

Favourite game of all time:
Tempest

I can still vividly remember the first time I played Mortal Kombat. I would have been 19 and I was at Quay Amusements checking out the new releases. There was a crowd gathered around a fighting game and amazingly, it wasn't a Street Fighter release. While it instantly captured my attention, thanks to its digitised characters, it was the ridiculous finishing moves that were grabbing the attention of everyone there. I'd never seen such a gory game in arcades before, and judging by the crowd, neither had anyone else.

Some have suggested that Mortal Kombat's over-the-top fatalities are simple smoke and mirrors, a clever parlour trick designed to distract players from the fact that it was a poor alternative to Capcom's Street Fighter, but that's never really rung true with me. The merits of the franchise are even more apparent with the reboot of the series that started with Mortal Kombat in 2011 and continues with the incoming release of Mortal Kombat 11 and we're delighted to chart the evolution of the series this month with cocreator, Ed Boon.

But worry not, if you're not interested in fatalities, friendships or indeed fighting games, we have plenty more in this jam-packed issue to grab your attention harder than Scorpion impales his victims.

Enjoy the magazine!

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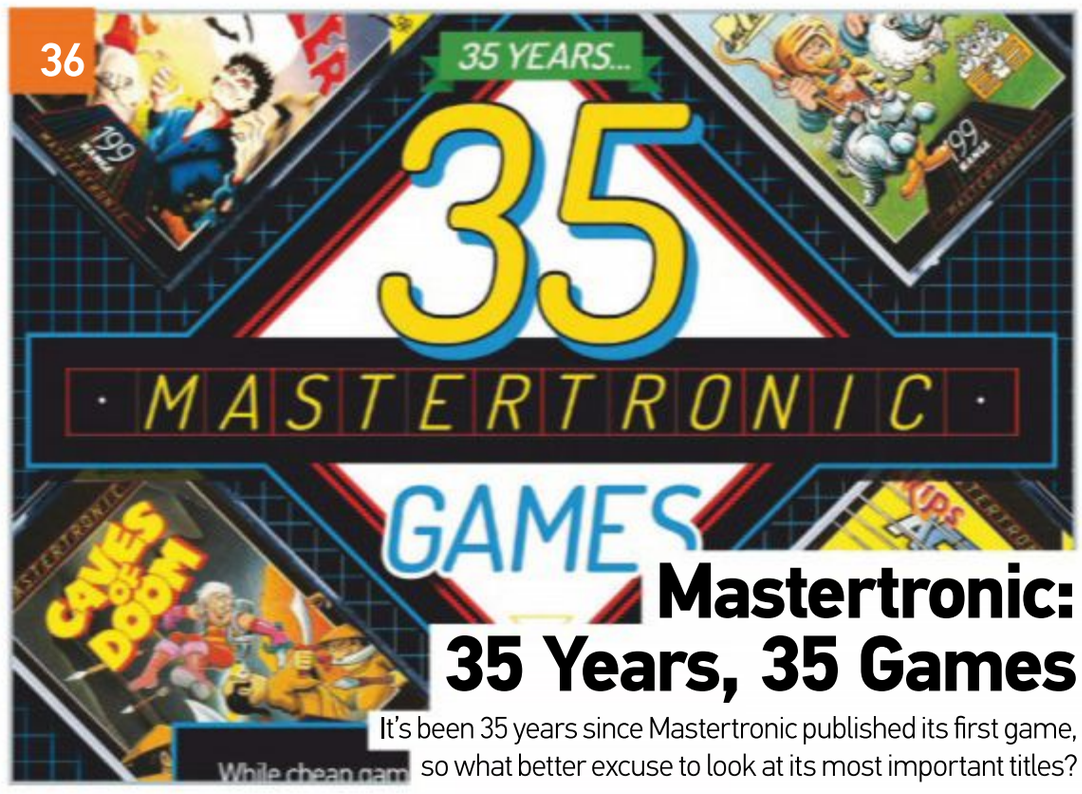

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Mastertronic: 35 Years, 35 Games
It's been 35 years since Mastertronic published its first game, so what better excuse to look at its most important titles?

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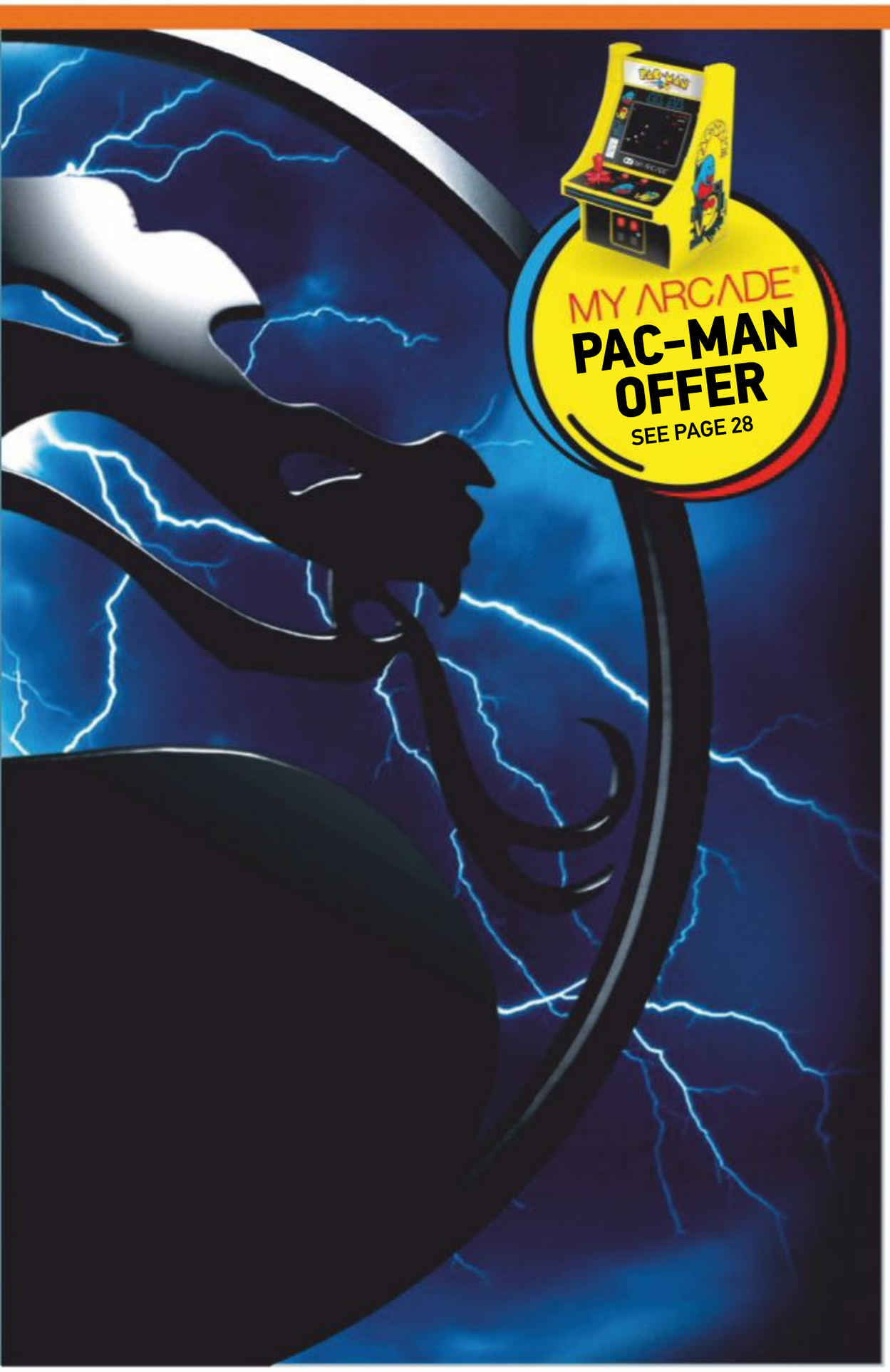

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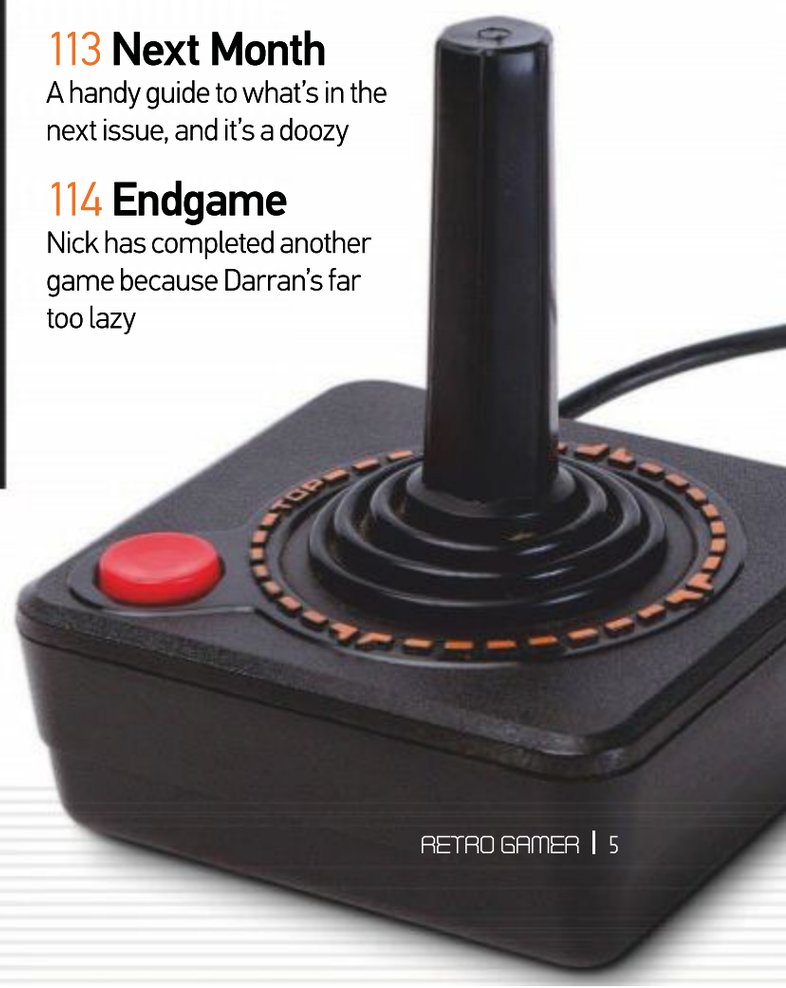

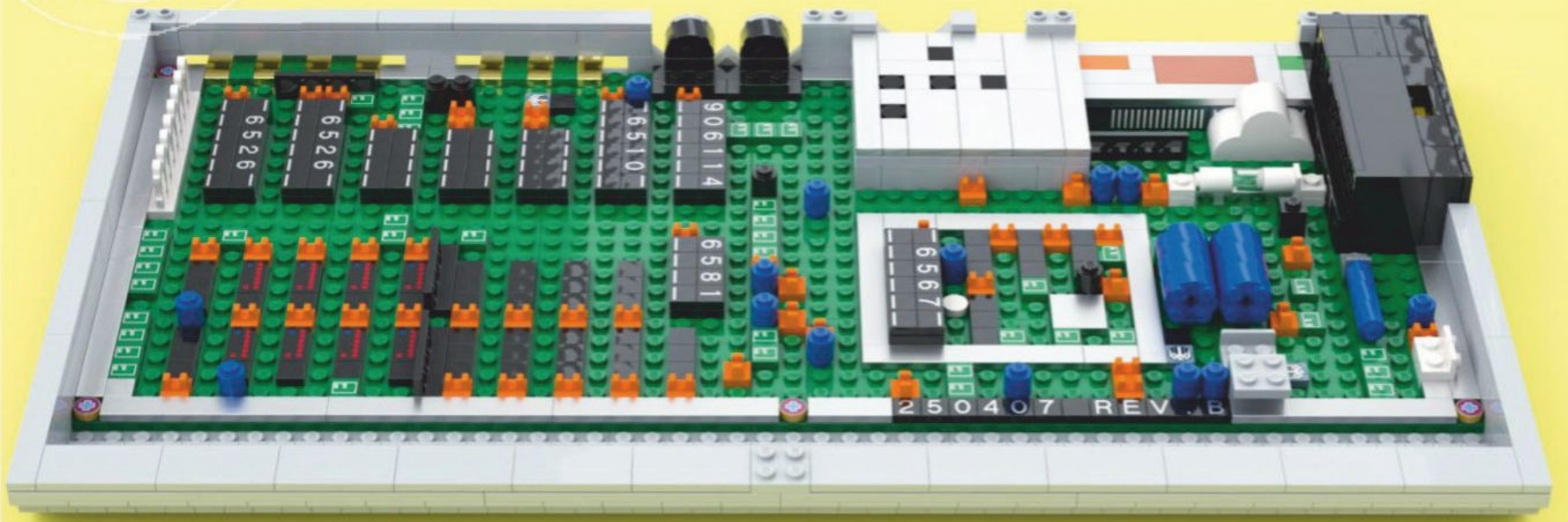

BUILDING A BETTER COMPUTER

Christian Simpson on creating a Commodore 64 out of Lego

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Christian Simpson tells us about his Lego tribute to the C64

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Our resident time travelling hipster heads to May 2002: the month of the UK GameCube launch

We're big fans of Lego and its Ideas range of creations. It's not only a brilliant way of giving money back to the community of fans that has made Lego such a global success, but it continually tickles our nostalgia glands, thanks to creations based on Ghostbusters, Voltron, Back To The Future and countless other classic franchises.

One of the latest ideas to be put forward to public vote is Christian Simpson's exceptional blocky recreation of a Commodore 64 – which actually works as a computer. We caught up with the talented master builder to find out how it came to be.

Why make a Commodore 64 out of Lego?

I mean, why not? Seriously though, I always want original and unique projects to feature on my retro YouTube channel, and had known about a tiny Lego Commodore 64 by Chris McVeigh that fits in the palm of your hand. I wondered what a full-size one might be like. And of course, I had to name it The Brixty Four. The Commodore 64 is my favourite retro machine and the one I have the fondest memories of. You could say I Comm-adore it, so it was a true labour of love.

How long did the project take?

From start to finish I worked on this and the build videos for six weeks solid. Feel free to join me at youtube.com/perifractic, take a look, and maybe even subscribe while you're there!

Did you build the C64 physically first or with a computer program?

I found a great program that's called Stud.io where AFOLs like me (Adult Fans Of Lego) can design more complex Lego shenanigans, and directly order the real bricks to build them. I began playing around to see if there were Lego pieces that would even work. And to my surprise and delight, there were two key pieces I found that really made this possible.

Was it tricky creating the distinctive curved shape of the Commodore 64?

Well after a lot of experimentation, one such piece was the smooth round front block to recreate that evocative bullnose design. It's actually from an aircraft hanger set! The other was a shock absorber from a Nineties Starguider land crawler, and I realised that I could line four up along an axle, to create a vertical line of keys for a

» You can follow Christian's work on his YouTube channel called Perifractic Retro Recipes.

» As you can see, Christian has a standard C64 here and the Lego build goes over it.

» Christian managed to create a Commodore 64-themed keyboard using Lego.

» Here's the software that Christian used to create his Lego masterpiece.

"Of course, I had to name it The Brixty Four. The Commodore 64 is my favourite retro machine"

Christian Simpson

fully working sprung mechanical Lego keyboard. After I absorbed my shock, I found it types beautifully, as you see in the video for part three.

Was sourcing the different Lego bricks expensive?

Yes, the biggest obstacle has been the price. These bricks are rare [and] command a higher price. Overall, I've put a couple of thousand dollars into the project, which wouldn't have been possible without my wonderful Patreons and PayPal supporters.

» Internal components and circuitry are lovingly recreated: you're looking at a 'fuse' here.

They're the ones who really built this, and I make sure they're well rewarded, in retro style of course!

The other obstacle was time, but it was important to me to make my final design free and open source for the retro community to use, so it's simply donationware. Anyone can download the master file and order their own parts. I always loved the idea of that when I would send away for donationware floppy disks back in the Eighties.

That hard work paid off. How many pieces did you use in the end?

The latest version has 1,836 bricks, weighing in at a solid 2.2 kg/4.8 lbs, and is a little over 1:1 scale.

What build parts are you particularly pleased with?

There were many happy surprises along the way. Most was when I realised that Lego 2x2 bricks with an axle hole somehow magically fit onto the axle shape of C64 keyboards, and so I created a keycap set to go along with the Lego cases and you can see them all at bit.ly/brixty. My plan is to turn this into the world's first replacement keycap set (of sorts) featuring real C64C key and PETSCII symbols, to fit onto real Commodore 64 keyboard bases to replace broken key sets. That's the Holy Grail and missing puzzle piece in creating a completely new real Commodore 64. There are new cases, PCBs and keyboard bases, but so far nobody has commercially released the actual keys (which are kind of important.) My ambition is simply to keep these special machines alive and relevant for future generations.

Are you using an original Commodore 64 board within your design or a modern computer like a Raspberry Pi?

I wanted to make two versions: a fully Lego Brixty Four, and just a Lego replacement case so you could install a real C64 motherboard into it, and use the real C64 keyboard in the Lego case too. As you can see in the videos, though, this was the most difficult aspect, but with some time and patience you can accomplish anything. It supports the C64 Reloaded, Ultimate64, Raspberry Pi & more. The Lego LED is even powered by the real C64 power switch. This and the Lego keys fitting Commodore's keyboard still amazes me and I think Lego and Commodore might have been in cahoots all along!

How is your design faring on Lego Ideas? Is there much competition?

There's no direct competition, but we're one-fifth of the way towards the goal of 10,000 votes needed for Lego to consider mass-producing this. If my fellow **Retro Gamer** readers would like to see a full-size Lego Commodore 64 on the shelves of their local shops, and pick it up to give it a shake, please vote as we can't do this without every one of you! Head to lego.build/2qWQ4Lw. Thanks for the chat and going brick to the future with me.

MEGA MEGA DRIVE NEWS

Just as we were going to press, Sega announced an update to the Mega Drive Mini. The emulation side is being handled by the excellent M2, Yuzo Koshiro has been tasked with creating the music for the menu screens, and there will be 40 included games. So far ten titles have been announced for both the Japanese and International consoles, and they include favourites such as Sonic and Sonic 2, and the third-party hits Castlevania: Bloodlines and ToeJam & Earl. More news next issue.

KONAMI CLASSICS

Konami is celebrating its 50th birthday with a series of digital compilations featuring its best-loved titles. Anniversary Collection: Arcade Classics should be available by the time you read this, with eight games including Gradius, Haunted Castle, Scramble and TwinBee. Castlevania Anniversary Collection is scheduled for early summer, and Contra Anniversary Collection is also scheduled for the same period, both of which will offer a selection of eight games from their respective revered franchises. Expect reviews shortly.

» My Arcade uses authentic arcade art where possible, making them lovely to display as well as play.

MINIATURE 10P GUZZLERS

MY ARCADE DISCUSSES ITS RANGE OF REPLICA ARCADE CABINETS

Officially licensed replica arcade cabinets are one of the big retro gaming trends of recent times. We've multiple companies producing cabinets of various sizes, from the likes of the Arcade1Up machines, which are about four feet tall, to the 1:6 scale Replicade cabinets. My Arcade has been operating in this space for a while, producing the Micro Player range of devices, but has recently added a new product to the marketplace – the Mini Player. To find out more, we spoke to Amir Navid, SVP product development and creative director for My Arcade.

"We're big fans of the late Seventies and Eighties videogame titles. At that time there was such excitement and a sense of awe around videogames, it was emerging technology and there was blossoming community of players that would meet at local arcades," says Amir. "We felt that many people shared this nostalgia for that period and these wonderful games, and we wanted to make something that people would love to collect and play and just look at and interact with." This idea became the Micro Player range of collectable miniature cabinets, each of which is 6.75 inches tall and contains a fully playable NES version of an arcade classic, displayed on a 2.8-inch screen.

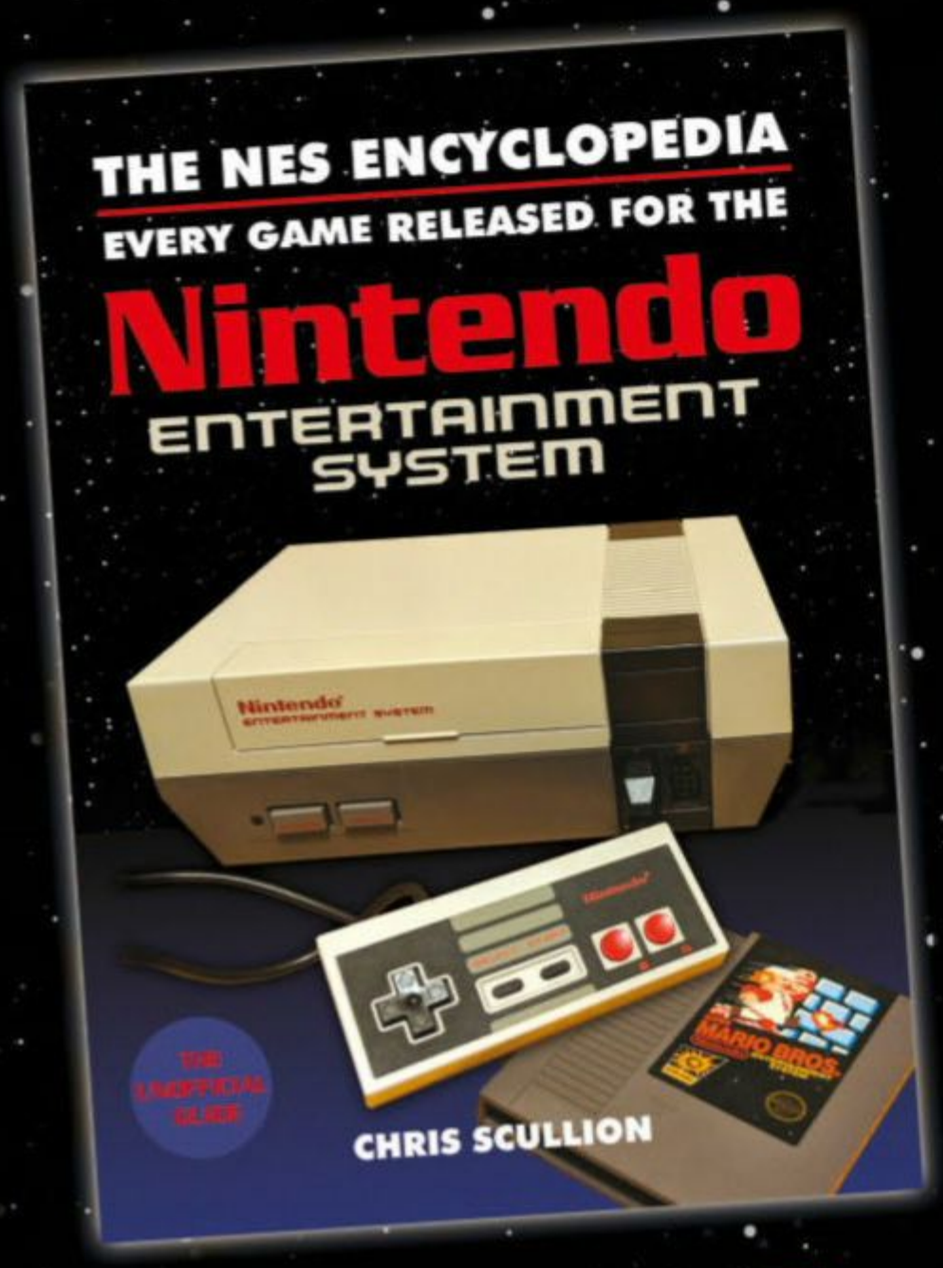
The Mini Players are a different proposition. These devices are ten inches tall and have 4.25-inch screens, and each comes loaded with a variety of games. The Data East model available now contains 34, including BurgerTime, Magical Drop 3 and Heavy Barrel, while the forthcoming Namco Museum model features 20, including Pac-Man, Dig Dug and Xevious. Unlike the games on the Micro Players, these are arcade versions. "The Micro Players are meant to be collectables and there is some price limitation since we want them to be a mass market product. We can do them with arcade versions instead of the 8-bit [ports], but that would bump up the price to a level where although we may make the hardcore enthusiasts happy, we would alienate a lot of others that are simply not going to pay those kind of prices," Amir explains. "We provide the Mini Player with the Arcade titles for the more hardcore collector, and the Micro Player for the masses."

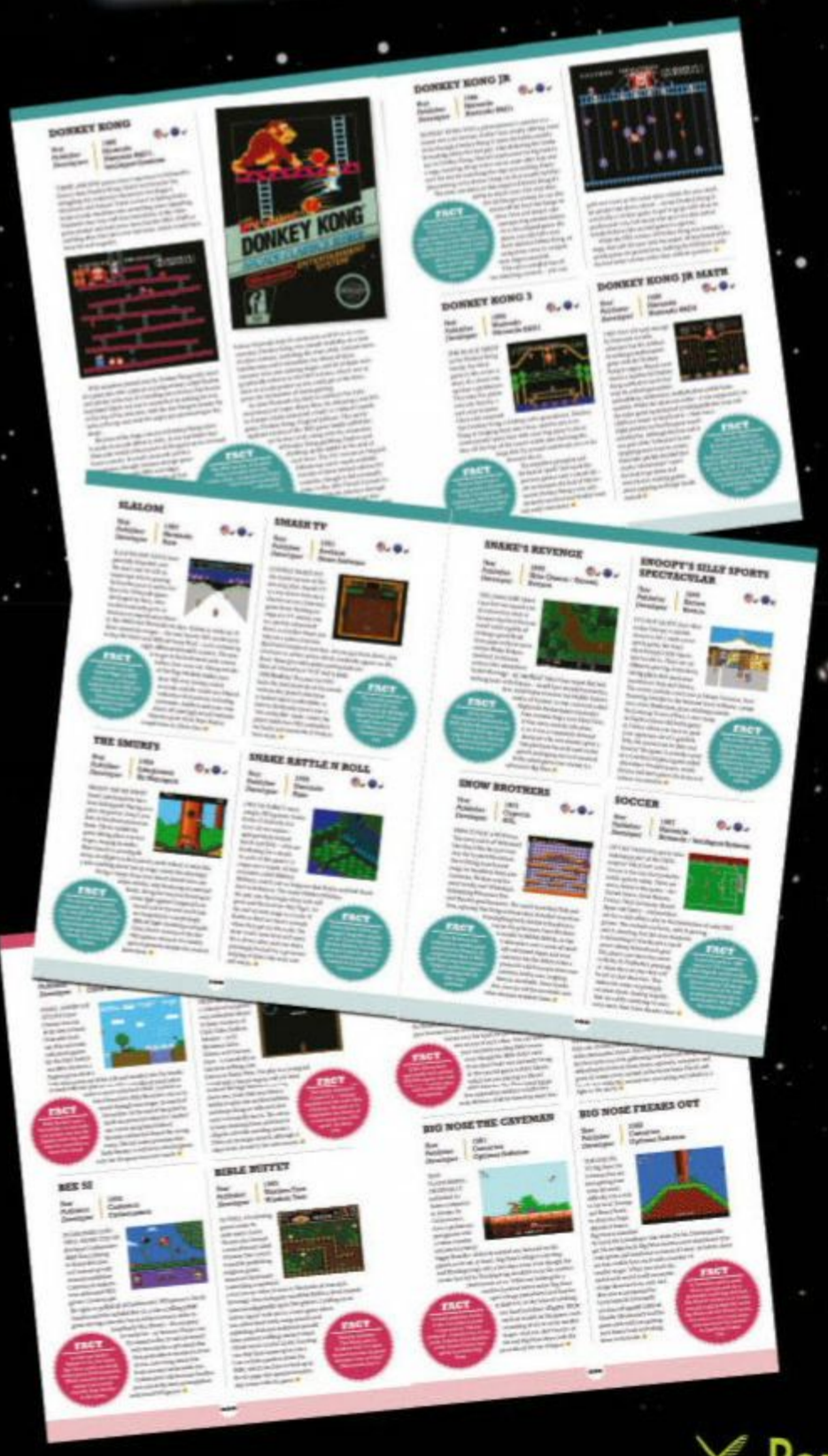
Right now there are few Mini Players compared to the Micro Players, but more are on the way. "The Mini Players tend to take longer," Amir tells us. "They are packed full of titles and there is a lot of details and approval stages because we are dealing with a lot of different IP. Typically it takes at least six months, but it can vary depending on the complexity and the developer's approval process." However, the Micro Players are also tricky, particularly when it comes to art and form factor. "We work very closely with the developers to try to get it right, but sometimes the art is not available to us, or we need to recreate from scratch," says Amir. When asked to tell us which one has been the most difficult to put together, Amir reveals, "The hardest one to date has not been released yet, and when it's released it will be obvious why. For fans who want to know more, please stay tuned to our E3 2019 announcements."

My Arcade Micro Players retail for £29.99, with 2019 releases including Ms Pac-Man, Rolling Thunder and Bubble Bobble. The Namco Museum Mini Player is set for release on 19 August, for £119.99. You can currently get a free Micro Player by taking out a **Retro Gamer** subscription, so head on over to page 28 now.

» Amir Navid, SVP product development/ creative director, My Arcade.

> **"We're big fans of the late Seventies and Eighties videogame titles"**
> Amir Navid





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Who is Paul Rose?
Paul is probably better known as Mr Biffo – the creator of legendary teletext games magazine Digitiser. These days, he mostly writes his videogame ramblings over at Digitiser2000.com. If you want more Biffo in your eyes, you can catch him as the host of Digitizer The Show at www.bit.ly/biffo2000.

Beat down

I've always struggled with certain games, back in the day. I was a sucker for hype, and bought many blockbusters – because they were the big new thing – that left me cold.

This tended to happen for me more often than not with one-on-one beat-'em-ups. I, like the rest of you, was excited to get my hands on Street Fighter II for the SNES. I remember exchanging a bunch of games for it at a little video store down the road from where I lived, which also sold imported games – lest we forget that it was 60 quid, or so, upon release (and I think I might have even paid more than that for it).

I was blown away, but only ever really by the graphics. The fact that it was arcade perfect was the big draw; it was a small thing, but the subtle 3D effect on the bath in E Honda's stage was my favourite thing about it. It wasn't that I couldn't see the appeal; it was that I was profoundly rubbish at it.

I never liked playing against another person, because I couldn't master the special moves. I still can't, nearly 30 years on. Oh, I can do a Spinning Bird Kick and launch a fireball, but my attempts to master the more complicated moves or combos would inevitably result in my defeat, as I wrestled with the controls. I would occasionally trigger a move by accident while mashing the buttons, but I always felt I was missing out.

This feeling was only exacerbated when I played Mortal Kombat. Not only were there special moves, but special victories, which required a certain button combination to instigate. I don't think I ever managed to see a single Fatality at my own hands, let alone Babalities or a Friendship. Given that the spine-ripping was the whole point of Mortal Kombat, it felt like I got a watered-down experience.

I appreciate that this is an admission that a former games journalist shouldn't be making; aren't we all meant to be amazing at every game? That weighed upon me, added to a sense of feeling like a fraud. But it's the reality; my fingers, my brain, my limited attention span, just couldn't ever get the hang of it.

What sort of made matters worse is that I loved a scrolling fighting game; Final Fight, Streets Of Rage, Aliens Vs Predator et al, remain among my favourite games of all time, yet by comparison to the one-on-one beat-'em-ups, it felt like I was in remedial class.

Admittedly, I'm more at peace with it now when I was. Gaming is a broad church, and there's enough choice for the hardcore, the casuals, and people in the middle like me, for us to all be well-served.

That said, I bought the last couple of Dark Souls games and Bloodborne, desperate to see what everyone else saw in them, and once again they made me feel like an abject failure!

Do you agree with Paul's thoughts? Contact us at:

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The Retro Hour

Paul Drury meets the hosts of the popular retro gaming podcast

Since January 2016, Nottingham-based Dan Wood and Ravi Abbott have produced a weekly podcast, which mixes retro gaming news and comment with big-name interviews. New episodes are released every Friday over at theretrohour.com where you can also explore the vast archive of over 160 previously aired shows.

» Ravi (left) and Dan (right) in the studio

What prompted you to produce a podcast?

Dan Wood: We were frustrated that the retro gaming podcasts we listened to tended to have an American perspective. Sure, we love the NES and the Atari 2600, but we wanted to talk about the Amiga 500 and the Spectrum, too. We also wanted to get the real stories behind our favourite games and companies, so the decision to feature a special celebrity guest each episode was reached early in the planning process.

What can listeners expect to hear on the show?

Ravi Abbott: Every Friday we bring you a jam-packed hour of audio entertainment. The first half is 'Retro News' so we cover items like new game and hardware releases for old systems, articles, think-pieces and general goings on in the retro world.

» The boys make no secret of their love for all things Amiga.

Then the second half of the show is dedicated to an in-depth interview with a gaming industry figure – a games designer, musician, artist, CEO, magazine reporter or anybody we think our listeners will find interesting.

Tell us about some of your favourite guests.

DW: We have been joined by huge industry legends like Nolan Bushnell, John Romero and Tom Kalinske, who were amazing. We recently did a full episode examining the history of Firebird Software, which was fascinating, plus we spoke to Howard Scott Warshaw for two hours as he was driving across America, talking about ET and his history at Atari. Hearing Dave Haynie explain the design decisions of the Amiga 4000 and Scott Miller giving us the history of 3D Realms and the rise of Shareware was geek heaven and getting Andy Crane to give us an hour-long inside story on Bad Influence, one of my favourite TV shows as a kid, was special, as he'd never done a podcast before. We still pinch ourselves that we get to speak to our childhood heroes every week.

Have you managed to coax any surprising revelations from your guests?

RA: Bret Mogilefsky revealed he used that annoying talking paper clip 'Clippy' from Microsoft Office to create all the lip sync for Grim Fandango! Also, we had some crazy tales about the development of Carmageddon from Patrick Buckland and Fergus McNeill about how they strapped a camera to the front of a car and repeatedly drove at a staff member to get the effect of somebody hitting the windscreen!

We hear that The Retro Hour is pretty popular.

DW: We recently passed our third anniversary and we've been featured in The Guardian, The Observer and by the BBC. We've had television news segments and we make the top five in the iTunes tech and gaming podcast charts most weeks now. The success of the show still surprises us. Ravi, myself and our cohost Joe Fox are just mates who like to chat about old games, so it's incredible so many people enjoy listening to it.

» The podcast has allowed Dan and Ravi to meet their gaming heroes such as Mr Doom himself John Romero (above) and Jeff Minter (below).

Any future plans for the podcast?

RA: We have always wanted to get Sir Clive Sinclair and Steve Wozniak on the show and we would love to get more female guests on to talk about their contribution to the history of gaming which is often overlooked. Roberta Williams of Sierra Online would be a fascinating interview. We have also been experimenting with livestreaming so you might be able to see our ugly mugs more on-screen!

Tune in at theretrohour.com.

> CAST LEVITATE

> RUB LAMP

> RUN AWAY

> BLOW HORN

> GET SLIPPER

> CLOSE EYES

> SING LULLABY

> ENTER UFO

> GIVE TREASURE TO PIRATE

> GIVE BONE

> DIG

> ROW BOAT

> GO NORTH

> SHOVEL SNOW

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```
: match "row boat" {
    : if (is_at "boat" && is_carried "") {
        : print "YOU ROW THE
    }
}
```

oars
a pair of oars

dog
oars
treasure

```
: match "dig _" {
    : if (is_at "island" && is_carried "spade" && has_not_created "treasure") {
        : print "YOU FIND A TREASURE CHEST." ;
        : create "treasure" ;
        : pause "2000" ;
        : redescribe ;
    }
}
```

THE LOSER HALLS
You are in the Loser halls of the great labyrinth.
Keeping your eyes open, you keep the lady MEDUSA atropine before you. It appears that she is not yet aware of your presence - thank subtle.

BACK TO THE NOUGHTIES

MAY 2002 – The software slump continues on consoles, but everyone's playing a roster of great GameCube games thanks to a belated launch, so they don't care in the slightest. Nick Thorpe takes a trip back in time…

NEWS MAY 2002

Former WWE wrestler David Smith, better known as the British Bulldog, passed away at the age of 39 on 18 May. Starting his career at the age of 15, Smith would find success in Britain and Japan in a tag team with his older cousin, the Dynamite Kid. He joined WWE in 1984 and found success during a series of spells with the company until 2000. David passed after suffering a heart attack while on holiday, which an autopsy suggested may have been caused by a history of steroid usage.

East Timor gained independence on May 20, becoming the first new sovereign state of the century. The territory had been a Portuguese colony until 1975, when a revolutionary force attempted to declare independence. It was swiftly invaded by Indonesia days later, and control was ceded to the UN following a 1999 independence referendum. With elections having been held in 2001, former militant Xanana Gusmão officially became the first president of the new state, with Mari Alkatiri of the left wing Fretilin party as prime minister.

On May 31, the 2002 FIFA World Cup began with an upset, as Papa Bouba Diop's goal secured Senegal a 1-0 victory over France. France had won the previous World Cup in 1998 as well as Euro 2000, but was missing Zinedine Zidane due to injury, while Senegal was contesting its first game in the tournament.

THE LATEST NEWS FROM MAY 2002

On 3 May, the GameCube arrived on European shores, meaning that PAL customers finally had access to the full slate of next-generation consoles. The months leading up to the launch were rife with uncertainty over both the date and price, but due in part to a prelaunch price cut, it was a belting success. The GameCube smashed the UK console launch record by shifting 69,000 units in its opening weekend, with plenty of stock still available for those who found themselves suddenly bowled over by the plucky console. Only time would tell whether this was an Xbox-style temporary period of success, or the foundation for a serious challenge to Sony's iron-clad dominance of the console market.

There was plenty to play, too, with 21 games available at launch. However, the key games hadn't changed much from the other regional launches – Super Monkey Ball (88%, NGC), Luigi's Mansion (90%, NGC) and Wave Race: Blue Storm (91%, NGC) all dated back to the Japanese launch eight months prior, and Star Wars: Rogue Leader was present at the US launch a couple of months later. Other strong sellers included third-party games such as Burnout (86%, NGC), Crazy Taxi (70%, NGC), Tony Hawk's Pro Skater 3 (87%, NGC) and Sonic Adventure 2 Battle. The Blue Blur's latest adventure wasn't as enthusiastically received on GameCube as it had been on the Dreamcast, though. NGC scored the game 70%, with reviewer Neil Randall complaining that it wasn't the "far superior" original.

More fun was clearly on the horizon too, as Capcom's terrifyingly detailed remake of Resident Evil scored 8/10 in Edge's import review. The game earned praise for its "breathtaking technical achievement" and its ability to "install a permanent sense of unease", but was criticised for failing to correct some of the original game's shortcomings. Not everything releasing overseas inspired such enthusiasm, though – Doshin The Giant was given a 5/10 review, with Edge unmoved by the 64DD conversion's brand of "gentle, if limited, entertainment". Smashing Drive received a 3/10 review, only garnering coverage "due to the dearth of releases coming out on Nintendo's system".

But Namco's arcade racer was saved the shame of being the month's worst game, by Xbox import Nezmix (scheduled for western markets as Sneakers). Media.Vision's dire puzzle game was panned, earning 2/10 in spite of its "expertly realised" locations, due to "limited interaction" and the impression that "the implied nonlinearity is utterly superficial." Another Xbox exclusive coming from Japan was Gunvalkyrie, an action game that was originally destined for the Dreamcast. Despite initial good impressions from a preview, Edge was underwhelmed with the final game, giving it 5/10. While it was found to

[GameCube] The GameCube launch did impressive numbers in the UK, despite the belated release.

[Xbox] Control frustrations and high difficulty meant that Edge wasn't too impressed with Gunvalkyrie.

[PS2] Final Fantasy X was astonishing to behold, but the lengthy dialogue sequences weren't to everyone's taste.

[Xbox] Nezmix, or Sneakers as it's known here, looked pretty but was as welcome as an infestation of mice.

offer thrills and some challenging areas, the control system was considered "complicated" and "too fussy," with the reviewer concluding that the game "offers hardcore gaming at its very best, and at its very worst".

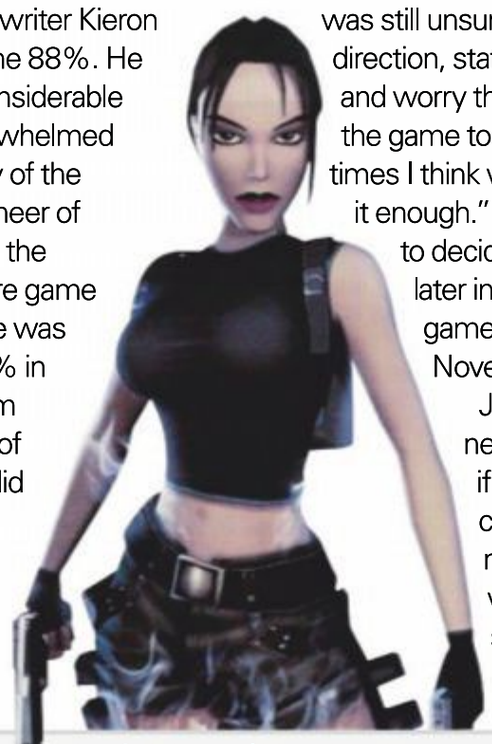
Over on the PS2, the PAL release of Final Fantasy X was the biggest title of a relatively quiet month, scoring a warm 8/10 in Official PlayStation 2 Magazine, which liked the visual achievements of the game and greatly disliked its overall linearity and unskippable cutscenes. Other releases included PC conversion Deus Ex (9/10, OPS2), vampire sequel Blood Omen 2 (6/10, OPS2), G1 Jockey (5/10, OPS2) and Sled Storm (5/10, Edge).

On the PC, Freedom Force pleased reviewers with its superhero charms. Edge gave the game 7/10, criticising what it felt was poor AI but praising the sheer variety of heroes and powers that were available to explore, noting that it was a game well-suited to expansion packs. PC Gamer was more enthusiastic, with future comic book writer Kieron Gillen awarding the game 88%. He felt that the game's "considerable failings are entirely overwhelmed by the double whammy of the irrepressible surface veneer of Sixties-hyper-camp and the beating heart of hardcore game theory". Dungeon Siege was even better, scoring 92% in PC Gamer. Reviewer Jim McCauley wasn't a fan of the fact that the game did "focus more on fighting and acquiring stuff than storytelling" and felt that the game would irritate Dungeons & Dragons fanatics, but felt that it was "crammed with new ideas that every second-rate RPG developer will be nicking next year." Console conversions Tony Hawk's Pro Skater 3 (87%, PC Gamer) and Grandia 2 (83%, PC Gamer) rounded out a month in which computer gamers were well served.

[PC] Freedom Force wasn't perfect, but the superhero fun and customisation options overcame any issues.

But the biggest story in PC Gamer was the impending return of one Lara Croft, whose new adventure Tomb Raider: The Angel Of Darkness was set to overhaul the series' formula after five broadly similar games. Core Design's team name-checked the likes of Shenmue and Deus Ex as influences, and showed off new urban environments and stealth-based gameplay. But developer Adrian Smith was still unsure of the game's direction, stating, "Sometimes I sit and worry that we have changed the game too much, at other times I think we haven't changed it enough." Players were set to decide for themselves later in the year, with the game pencilled in for a November release.

Join us again next month to see if the GameCube can maintain its momentum, and whether the console software slump will end. *



Lara Croft does stealth in modern urban environments – is that what fans of raiding tombs would want?

CHARTS

MAY 2002

PLAYSTATION 2

1. Metal Gear Solid 2: Sons Of Liberty (Konami)
2. Gran Turismo 3: A-Spec (Sony)
3. Grand Theft Auto III (Rockstar)
4. Tekken Tag Tournament (Sony)
5. State Of Emergency (Rockstar)

PC

1. Medal Of Honor: Allied Assault (EA)
2. Command & Conquer: Renegade (EA)
3. The Sims: Hot Date (EA)
4. Star Trek: Bridge Commander (Activision)
5. Championship Manager: Season 01/02 (Eidos)

MUSIC

1. Just A Little (Liberty X)
2. If Tomorrow Never Comes (Ronan Keating)
3. Escape (Enrique Iglesias)
4. What's Luv (Fat Joe feat. Ashanti)
5. Kiss Kiss (Holly Valance)

FILM

1. Star Wars: Episode II – Attack Of The Clones
2. About A Boy
3. Not Another Teen Movie
4. Panic Room
5. Thunderpants

THIS MONTH IN...

Edge

This issue saw Edge handing out its annual awards. Halo was the big winner, winning three awards including game of the year, beating Rez and Super Monkey Ball into second and third place respectively. Sega won publisher of the year, Nintendo took developer of the year, and the Xbox gained the hardware innovation award.

NGC

"Do Nintendo view Europe with a deep, malicious hatred?" asks NGC. "As long as Nintendo has a loyal following with plenty of money to spend, they'll continue to treat us like dirt because they know that we'll always hand over all our cash when the GameCube finally arrives," says the refreshingly frank reader Steve Porter.

Dreamcast Magazine

The Sega dream is dead, as the last Dreamcast magazine finally ceases publication. Issue 34's content includes a ten-page retrospective on the console and the magazine, reviews of the final few PAL releases including Conflict Zone and Freestyle Scooter, and reprinted reviews of the system's best shooting games.

Kabuki Ittou Ryoudan

PLAY FIGHTING

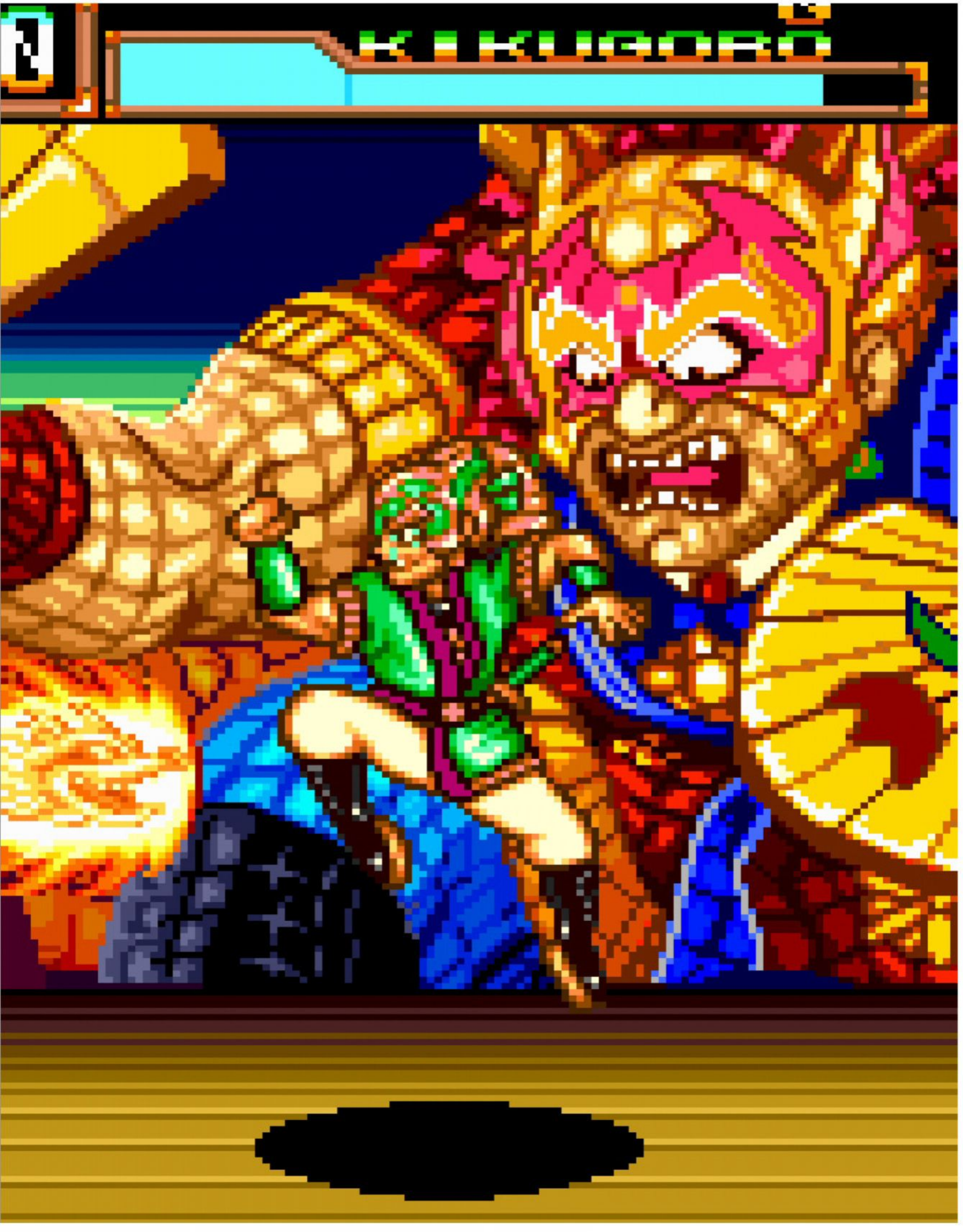
RETROREVIVAL

» PC ENGINE » 1995 » HUDSON SOFT/RED COMPANY

Do you ever feel like you're missing something important, but can't quite put your finger on what it might be? I do, and I distinctly remember getting it when I was shopping for PC Engine games a while ago. It was something I dismissed at the time, because my setup for NEC's dinky console includes most items required to open up the library – I have my CD-ROM unit and I have the Arcade Card, so what else could I possibly need?

For some reason, I ended up settling on buying fighting games. That's not a genre the PC Engine is renowned for, remarkable Street Fighter II conversion aside, yet there's actually some pretty good stuff that arrived late in the system's life – you just have to be willing to dig for it. Kabuki Ittou Ryoudan is one of the gems, and is a spin-off of Tengai Makyou (an RPG series which is popular in Japan but virtually unknown here). This game uses the Arcade Card, and you can tell by some impressively detailed backgrounds and relatively large character sprites, as well as all the speech effects. It's also one of the better console-exclusive fighting games of that era, with a functional combo system and special moves lifted straight from Capcom's famous fighter.

Of course, being a Street Fighter II clone it requires a six-button controller, and that's what I'd forgotten. So whenever I play this at the moment, I have to use the awkward compromise that'll be familiar to anyone who tried to play Street Fighter II on the Mega Drive – pressing the start button to swap between punches and kicks. Curse my fallible memory!


KIKUGORO

THE EVOLUTION OF

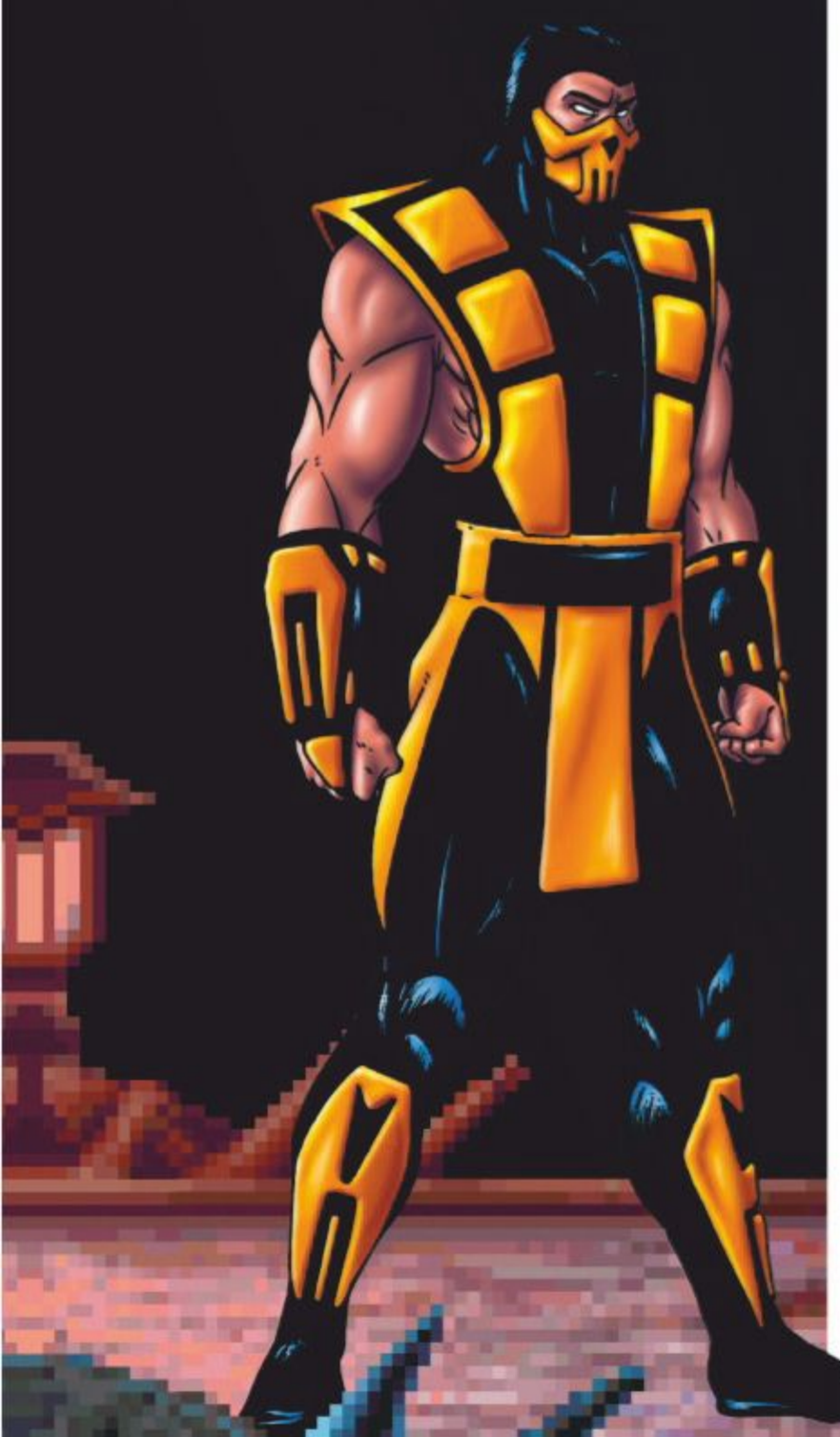
MORTAL KOMBAT

There are few gaming joys greater than decapitating your humbled foe, but there's much more to this classic series than that. Ed Boon explains why Mortal Kombat has been a lethal competitor in the fighting game scene for over 25 years

Words by Nick Thorpe

» [Arcade] Shang Tsung was demoted from boss to regular fighter, and proved extraordinarily difficult to master.

» [Arcade] Scenes like this gave *Mortal Kombat* a dangerous edge.



There are very few games in history that could be described as having achieved true notoriety, but Mortal Kombat is definitely one of them – after all, it was a lightning rod for controversy in its earlier years, thanks to being the fighting game where you could kill people. Concerned moral guardians didn't want kids anywhere near the series, but they could hardly avoid it because Mortal Kombat has been a genuine cultural phenomenon, with a multitude of games as well as film, TV and comic adaptations.

It's easy to get caught up in all of that, but to do so is to ignore why the series has achieved such longevity. Very little is constant in the world of Mortal Kombat, and if your impression of the series is still a vision of rainbow-hued ninjas differentiated only by their special moves, you've missed a couple of decades of evolution. For a series so often judged by its grizzled exterior, it's the guts underneath that are truly fascinating.

The Mortal Kombat series can be broadly categorised into a few different eras, the first of which was naturally the 2D era. Despite using 2D sprites like every other fighting game had at the time, Mortal Kombat was in part defined by its look. "The idea for the first Mortal Kombat came by combining a (relatively new) digitisation technology that Midway Games had with a fighting game," explains Ed Boon, cocreator of Mortal Kombat and creative director at NetherRealm Studios. This technology allowed the developers to use filmed images of real objects to create sprites, rather than drawing them from scratch. The fighting game part of the pitch was based on the trends of the time. "Street Fighter II was very big in 1991, and we originally wanted to make a Jean-Claude Van Damme fighting game because he was also very popular at the time. When he passed on our idea, we decided to make a fighting game using characters we would create." The setting that was created centred on a fighting tournament, in which the warriors of Earthrealm (our world, essentially) fought to save it from the sorcerer Shang Tsung. Through the sequels, we'd learn more of the story – Shang Tsung was attempting to take over Earthrealm on orders from Shao Kahn, the supreme ruler of supernatural realm called Outworld.

Midway wasn't the first studio to attempt to combine digitisation technology with the fighting genre, as fans of Atari Games' Pit-Fighter will tell you. But that game had come before Street Fighter II, and as well as kickstarting a boom in popularity for the fighting genre, Capcom's game provided a key point of comparison for Mortal Kombat. "Street Fighter had an anime art style and we wanted our game to look different and stand out more. Mortal Kombat's visuals played a critical role in making the game stand apart from Street Fighter, as well as other arcade games. Mortal Kombat looked

HERE'S JOHNNY!

Daniel Pesina portrayed Johnny Cage and the ninja characters in Mortal Kombat and Mortal Kombat II – we speak to him about his experience with the series

© Daniel Pesina

» Daniel is front and centre in the cast picture, with the Cage knuckleduster.

How did you become involved with Mortal Kombat?

In short, I became involved in *Mortal Kombat* through a friendship planted in a group of friends. A friend of mine, who later went on to help draw the first *Mortal Kombat* comic and did the artwork for Nintendo's home version of *Mortal Kombat*, put together a creative group – a group of friends who loved the arts and are geeks! We would go to movies together, collect comics, play *Dungeons & Dragons*, draw, mix records, break dance, go to the arcade, etc. One of the group was John Tobias.

Years later he gave me a call and asked if I could help him on a fighting game. He wanted to videotape myself, Rich DiVizio and my brother Carlos Pesina displaying martial arts moves and play fighting together. He had some basic drawings of some characters and would present them to the company he worked for, Midway Games. I agreed. We went to Midway Games on the hush. John wanted no one to know about this project until his presentation. We filmed some things and he presented them. The company was interested and wanted to see more and hear about our ideas so a meeting was made.

During that meeting the group spoke about Kung Fu movies we like including *Enter The Dragon*, *Big Trouble In Little China*, *5 Deadly Venoms* as well as comics such as *Iron Fist* and *Shang Chi Master Of Kung Fu*.

As we were leaving I heard John ask the rep what he thought and the rep shook his head and made a sour face. Later on John called me and said that they liked the idea of a fighting game, but not our fighting game – basically, 'No.' A new idea came up focusing on a mainstream fighting game with Jean-Claude Van Damme.

Did you have much knowledge of fighting games beforehand?

I do not play fighting games that often. The fighting is not attractive to me, there are certain elements that I think are missing.

Did you have to do any sort of research for your role of Johnny Cage?

Most of the creation was done while filming and was a collaboration or competition to come up with a better idea. For example, John based the Johnny Cage character on Daniel Rand for Iron Fist. He told me to act like a movie star. I came out waving to the camera and blowing kisses. John liked it and said to do more, so I came out with the sunglasses, blew kisses, flexed my biceps and threw the glasses.

This was the basic creative engine for the first three characters. Cage, Kano, Raiden. We started taking outside the group ideas after that. People working on the game started getting the vision!

How much input did you have into the game's moves?

As far as moves go, day one of creation John and I spent about eight hours filming while I performed martial arts moves, creating a path for the game. Day two, eight hours again but we learned a few things, and we started to organise high, medium and low techniques. On the third day we started adding things like knees, headbutts and sweeps along with reactions. Including falls on concrete – ouch! On the fourth or fifth day we had the main programmer come to tweak the moves so they would work for the game.

My other credits include insisting the ninjas be Lin Kuei, the first fatality, and the use of props to help us video the project. Plus the kiss of death for Sonya and Katana and Mileena's fatalities, to name a few things.

Why was Mortal Kombat II your last appearance in the series?

I was promised that we were only going to produce 200 arcade cabinets. I mentioned if they were going to make more, I would get a game. They told me, 'No way, only 200 will be produced.' When its success exploded I asked what was going on and was promised a bonus. I did not receive that, but I thought they would get to it. It went to the home systems and again I mentioned our agreement. They told me not to worry, as we would be taken care of. Near the end of *Mortal Kombat II* they presented me with a new contract, basically signing my rights away with the basic dollar amount I mentioned to them when we first started the game – the cost of a game. I thought this was not fair and never helped them again.

Why do you think Mortal Kombat remains so loved by so many gamers?

The game made connections and friendships. People recall playing with friends or making friends playing the game – escaping to the basement or their room to play the game for hours, alone or with friends. Skipping school to play and getting in trouble. There are so many stories. Friendships continue even today. Some still play the game together with the same friends.

Do you have any final message for the Mortal Kombat fans out there?

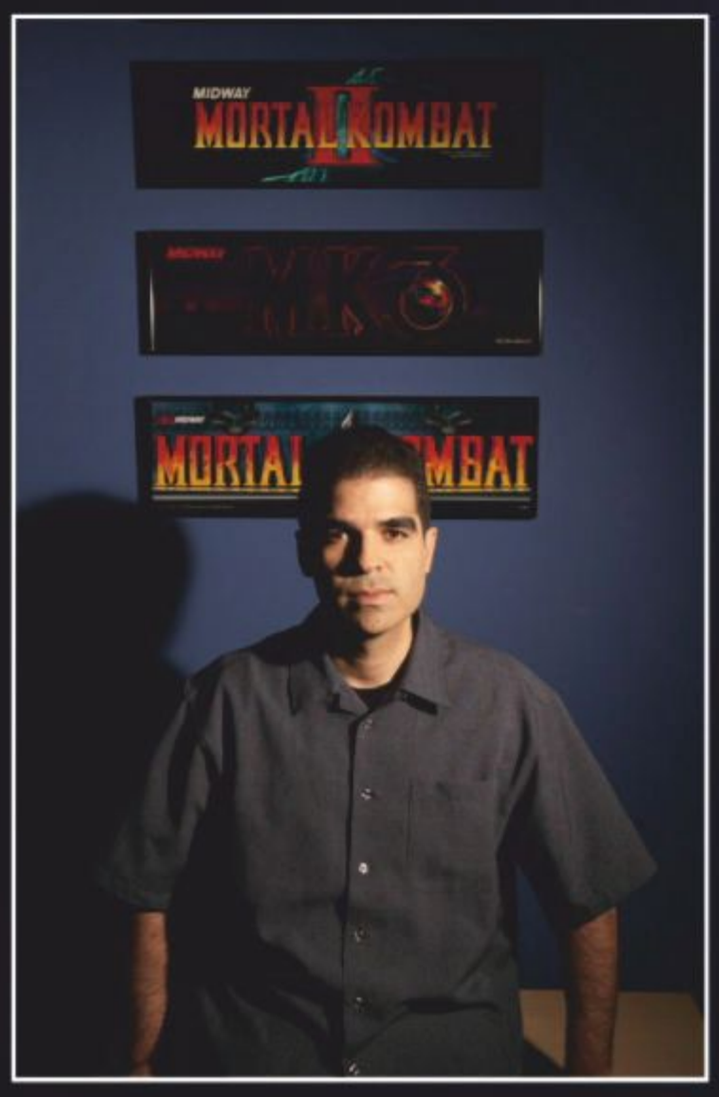
Tell your fans to keep creating and sometimes in life you must FIGHT!

real and its imagery was of real people and real objects," explains Ed. "The realistic look of our digitised characters prompted us to add other realistic elements like blood and it kind of took off from there." This digitised art style would be Mortal Kombat's signature look, and would eventually come to influence a number of games such as Way Of The Warrior, Tattoo Assassins and even Street Fighter: The Movie.

While the Midway team carved its own path when it came to the technological side of the game's appearance, there was plenty of pop culture influence when it came to the theme and style. "Mortal Kombat was inspired by many movies that we grew up seeing. Big Trouble In Little China certainly was one of those movies. The Asian theme and setting was John Tobias' idea," Ed tells us. "That, along with Dan Forden's music, really gave Mortal Kombat a lot of its feeling and overall tone." This look was very strong in the first game, and gained more fantastical elements in the second game, which took place in Outworld, another realm of the game's universe. Mortal Kombat 3 instead focused on urban locations to sell the story of Outworld's invasion of Earthrealm, but the Ultimate Mortal Kombat 3 update added more fantastical locations such as Scorpion's Lair to balance the themes a little better.

Character design was a little trickier. "We had never made a fighting game before, so we did a lot of experimenting. We did know that we wanted to make our characters do more 'magic' based special moves, rather than strictly martial arts," says Ed. This developed over the course of the original trilogy – while the characters were realistic in appearance, moves such as fireballs and energy waves added the fantasy element. Only the four-armed penultimate boss Goro had a truly outlandish design, and as a result he was the only character to be created with a clay model and stop-motion animation. But many of the original cast are the amongst the series' most beloved characters. "Scorpion and Sub-Zero are probably the most iconic and recognizable of all the Mortal Kombat characters," says Ed. "Raiden and Shang Tsung are up there too."

All four of the characters Ed mentioned were retained for Mortal Kombat II, alongside Liu Kang and Johnny Cage, and the new female fighters Mileena and Kitana used the same colour-swapping technique as Scorpion and Sub-Zero's sprites had in the original, saving space while adding more variety. But there were advances to be found – the game began to add crazier elements to the character designs, like Baraka's bladed arms and the incorporation of actual reptilian elements into the design of Reptile. Mortal Kombat 3 developed the cast further, introducing the series' tradition of major cast refreshes by dropping five of the previous game's characters and adding seven new ones. This was partially because Midway had ended up in disputes with a number of the actors



» Ed Boon has been involved in the *MK* series since the beginning.

» [Arcade] Mortal Kombat II 's newcomers like Kitana quickly became popular mainstays of the cast.

that had portrayed characters in the first two games – some were recast, like Liu Kang, while others were removed. The game had even more fantasy elements, from the cyborg duo of Cyrax and Sektor to Sindel's hair attacks. Digitisation did prove to be a limiting factor later on in the 2D era, though. When the previously omitted characters were returned in updates of Mortal Kombat 3, the nature of the existing footage limited what the team could do – for example, Mortal Kombat Trilogy included new moves for Baraka, Kintaro and Shao Kahn, which had to be constructed using old sprites from Mortal Kombat II that had been left unused.

But as much as the characters and setting were appealing factors in Mortal Kombat, they wouldn't have gained players' attention if the fighting hadn't been solid. The initial game established the series' five-button system – high and low punch buttons, high and low kick buttons and a block button. "We wanted the player to be able to walk backwards without blocking during their opponent's attacks. We wanted to be different from Street Fighter," says Ed. "We also felt like the joystick should be used strictly for movement, while the other actions should be triggered via buttons." In Mortal Kombat 3, a run button was added, allowing players to rapidly close the distance between fighters. Advanced players would learn the potency of juggle combos in the first game – attack strings that kept a vulnerable opponent in the air for further hits. These were refined further in Mortal Kombat II, and Mortal Kombat 3 added chain combos, preset inputs allowing players to inflict huge damage with a rush of blows. Combined with the run button, these additions made the third game far quicker and less defensively oriented than its predecessor.

Of course, the most spectacular attacks were saved for ending a fight. The original Mortal Kombat gave each character a single Fatality move, a gory special technique that would kill the opposing fighter. These were a huge source of controversy at the time, but they were also a key part of the game's appeal – while the moves themselves were completely over the top, it was still shocking to see them performed on relatively realistic character sprites. Surprisingly, these weren't a priority in development.

"Creating Fatalities back then mainly involved us trying to construct them by reusing existing art. We had a very limited amount of storage remaining in the game, which meant very little space for Fatalities," Ed explains. "You'll notice that a few characters' Fatalities (Raiden, Johnny Cage, Sub-Zero) all involved removing the opponent's head and having their body fall to the ground. Johnny Cage's Fatality reused his uppercut animation, and we just had the opponent's head pop off. So, we didn't have as much room to create original Fatalities for each

TIMELINE

Here's the entire Mortal Kombat line of games, from start to finish

- 1992 — MORTAL KOMBAT
- 1993 — MORTAL KOMBAT II
- 1995 — MORTAL KOMBAT 3
- 1995 — ULTIMATE MORTAL KOMBAT 3
- 1996 — MORTAL KOMBAT TRILOGY
- 1997 — MORTAL KOMBAT 4
- 1997 — MORTAL KOMBAT MYTHOLOGIES: SUB-ZERO
- 1999 — MORTAL KOMBAT GOLD
- 2000 — MORTAL KOMBAT: SPECIAL FORCES
- 2002 — MORTAL KOMBAT: DEADLY ALLIANCE
- 2004 — MORTAL KOMBAT: DECEPTION
- 2005 — MORTAL KOMBAT: SHAOLIN MONKS
- 2006 — MORTAL KOMBAT: ARMAGEDDON
- 2006 — MORTAL KOMBAT: UNCHAINED
- 2007 — ULTIMATE MORTAL KOMBAT
- 2008 — MORTAL KOMBAT VS DC UNIVERSE
- 2011 — MORTAL KOMBAT
- 2011 — MORTAL KOMBAT ARCADE KOLLECTION
- 2015 — MORTAL KOMBAT X
- 2019 — MORTAL KOMBAT 11

» [PS2] The zombified Liu Kang doesn't normally carry a giant hammer – he picked that up mid-battle.

fighter. But players never really knew this, and everything turned out okay I suppose."

The original Fatality moves were all quite dark, but as the 2D era progressed finishing moves became a source of levity in the series thanks to Friendships and Babalities. They were no easier to perform though, and the developers didn't explain how to do so. "From the beginning we wanted to have a lot of mystery elements in the game, which is why we never documented how the special moves and Fatalities were performed," Ed recalls. "Players had to discover the moves by themselves. That mystery element heightened the interest from players who kept wondering what else was in the game that they hadn't seen." That sense of mystery was a huge draw for the arcade crowd, and was heightened by another long-running Mortal Kombat tradition established in the 2D era – a proliferation of secrets. "I personally have always been a big fan of game secrets and Easter eggs. Mortal Kombat was our chance to go crazy with that," confesses Ed. "The original hidden character Reptile was my favourite. Street Fighter had a 'Sheng Long' rumour that some people thought was a hidden fighter or boss. So how cool would it be to actually have a hidden fighter in our game? The idea came to me one day while taking a lunch break and by that evening he was in the game. I didn't tell anyone he was in the game and was hoping it would be seen rarely enough that most people would think he wasn't real."

The green-hued ninja combined Scorpion and Sub-Zero's moves, and before long his existence was confirmed. By the sequel, the developers were actively working to create urban legends – the service menu for Mortal Kombat II had a counter for 'Kano transformations', fuelling the rumour that Shang Tsung could become the otherwise unplayable character. Actual secret characters Jade and Smoke would peek out from behind trees in one stage, and a third inclusion named Noob Saibot was completely black in colour. Mortal Kombat 3 took this to its ultimate conclusion with Kombat Kodes, six-digit strings which could be input before matches to alter rules and unlock secrets.

The 2D era was a time of explosive popularity for Mortal Kombat. The original game was a huge success in arcades, and Acclaim capitalised on this with a raft of home conversions backed by a huge marketing campaign, promoting the 'Mortal Monday' release date in 1993. In a review of the SNES version, which had a lack of blood and fatalities due to Nintendo's content policies at the time, Edge complained that "the lack of blood 'n' guts goes a long way to reducing what gave the game its weird appeal" and opined that the underlying

» [GameCube] Bo Rai Cho fights with human vomit. Lovely.

fighting wasn't as good as Street Fighter II. Mortal Kombat II tightened the game design considerably, and was much closer competition – evaluating it head to head with Super Street Fighter II Turbo, CVG felt that Midway's game had the advantage, assessing it as "a more exciting escapist game with more variety between characters and a far superior atmosphere". Mortal Kombat 3 was also critically acclaimed, but that wasn't so unanimous as with the previous game. In the US, Next Generation magazine described the new characters as "desperately in need of something endearing" and complained that "in an industry which depends on innovation to keep it fresh and interesting, MK3 just doesn't deliver". That didn't stop it performing admirably in arcades and at home, and two updates were released. Ultimate Mortal Kombat 3 originated as a free upgrade for arcade operators, which rebalanced the game and added fan favourite characters like Scorpion and Kitana. The home-exclusive Mortal Kombat Trilogy included every existing character, plus stages and music from the first two games.

By this point in time, Mortal Kombat had gone about as far as it could in 2D. The industry was changing and though digitised sprites arguably looked more convincingly human than the 3D models of Virtua Fighter 2 and Tekken, those were the games that Mortal Kombat 3 had been in competition with. The decision was made to utilise 3D graphics starting from 1997's Mortal Kombat 4, beginning a new era for the series. This was initially a mixed blessing for the artists. On one hand, working in 3D allowed for any sort of movement the team wanted – there was some motion capture, but also a lot of manual animation. On the other, Mortal Kombat 4 was the team's first 3D game and where it had led the way with digitisation, it was now essentially playing catch-up. Additionally, the series had lost one of its distinguishing factors as it was no more realistic than the competition. Despite these growing pains, the series caught up with the competition considerably with its first PS2 instalment Mortal Kombat: Deadly Alliance, and by the end of the generation Mortal Kombat: Armageddon looked as good as any other fighting series around.

The new graphical technology allowed the game design to evolve. Mortal Kombat 4 introduced the ability to dodge attacks by sidestepping, an obvious but worthwhile use of the new 3D space. Environmental interaction became more important starting from Mortal Kombat: Deadly Alliance as stages could be different sizes and shapes, and occasionally contained objects. Mortal Kombat: Deception upgraded the arenas further by including death traps – a variation of the 'ring out' concept with a grisly twist, whereby if an unfortunate player was knocked into a designated area, they would instantly be killed and lose the round regardless of their remaining health. Another major development in the series during the 3D era was the introduction of weaponry. Weapons were a limited and gimmicky inclusion in Mortal Kombat 4, but Mortal Kombat: Deadly Alliance developed on the theme massively by incorporating them into new selectable fighting styles. Each character could choose from three fighting styles, two unarmed and one armed – these shared special moves, but the basic techniques of each were completely different and could be swapped out on the fly. This system persisted through Deception, but was scaled back to two styles for Armageddon. Other gameplay innovations included the Breaker, a technique introduced in Mortal Kombat: Deception allowing the player to interrupt their opponent mid-combo in order to regain the initiative.

The major cast refreshes that had started with Mortal Kombat 3 became a key theme of the 3D era. Mortal Kombat 4 didn't include any of Mortal Kombat 3's newcomers, and Deadly Alliance went even further, discarding almost every character that had debuted in the previous game and even dramatically killing off series hero Liu Kang. Deception dumped slightly less of the Deadly Alliance cast, but by the time Mortal Kombat: Armageddon pulled together a full cast reunion,

"From the beginning we wanted to have a lot of mystery elements in the game"

Ed Boon

» [PS3] Kratos feels right at home here as a guest character.

FINISH HIM

Mortal Kombat offers many ways to deal with your unfortunate opponent at the end of a match. Do you remember them all?

FATALITY

MORTAL KOMBAT

■ The original finishing move, and for many fans the best. *Mortal Kombat*'s Fatalities let you murder your opponent in cold blood, often in an amusingly creative manner.

BABALITY

MORTAL KOMBAT II

■ If you can beat your opponent while using a restricted set of moves, you can turn them into a baby. What a lovely way to mock your friends.

HARA KIRI

MORTAL KOMBAT: DECEPTION

■ Your fighter can commit suicide – but only if you get the right command in before the winner of the match performs their own.

MERCY

MORTAL KOMBAT 3

■ When you feel like you haven't beaten your opponent badly enough, you can sacrifice some of your own life to let them fight on.

KREATE-A-FATALITY

MORTAL KOMBAT: ARMAGEDDON

■ Rather than having individual finishing moves, this system allowed a gigantic cast of fighters access to the same suite of mutilation methods.

FRIENDSHIP

MORTAL KOMBAT II

■ Instead of killing your opponent, why not offer to try to make a friend of them? This definitely wasn't a pointed response to controversy.

ANIMALITY

MORTAL KOMBAT 3

■ These are like regular fatalities, except your fighter turns into a fearsome animal like a polar bear, shark, giant tarantula or rabbit.

HEROIC BRUTALITY

MORTAL KOMBAT VS DC UNIVERSE

■ You couldn't have Superman kill someone, so the DC lot have access to these comparatively tame and disappointing nonlethal finishes.

STAGE FATALITY

MORTAL KOMBAT

■ Certain stages offer unique ways of killing your opponent, like a plunge into acid. The Pit's spiked floor is the original and most famous of the lot.

BRUTALITY

ULTIMATE MORTAL KOMBAT 3

■ These 11-hit combos end with your opponent exploding in a shower of gore. They're harder to perform than regular fatalities, and less fun.

FACTION KILL

MORTAL KOMBAT X

■ Each of *Mortal Kombat X*'s five factions has five unique and simple death blows, which can be utilised no matter which character you've chosen.

» The series has picked up quite the roster over the years.

» [PS2] The arenas are a big part of Mortal Kombat's appeal.

"I personally have always been a big fan of game secrets and Easter eggs. MK was our chance to go crazy with that"

Ed Boon

there were over 60 characters to include – an impressive number. That wasn't the only way the 3D era games impressed with content, as the single-player Konquest mode provided an action-RPG quest for players to sink their teeth into. The 3D era also introduced the concept of the Krypt, a vault of unlockable goodies, as well as robust minigames. The falling block game Puzzle Kombat and Chess Kombat appeared in Deception, and the kart racer Motor Kombat debuted in Armageddon.

Mortal Kombat's 3D era was interesting and experimental, and despite not being the pop culture phenomenon it had been during the early Nineties, the games were still positively received by both critics and audiences. Typical review scores for Deadly Alliance hovered around the 8/10 mark and in a 2011 interview with NowGamer, Ed mentioned that it had sold 3.5 million copies. Deception fared similarly well critically and sold 1.9 million copies in a year. Mortal Kombat: Armageddon didn't fare quite as well critically, receiving scores that were more solidly in the 7/10 range. Part of the reason for this was a sense that the series was bloated – "While fans of the series may struggle not to drown in their own drool over this massive cast, anyone even marginally less fanatical won't recognise at least half of them," noted Luke Albigés in a 5/10 review for Eurogamer. "While there's obviously been some attempt to differentiate between them, the fact that so many characters look and play alike is still very much in your face." Armageddon still did well in shops, shipping over a million copies before the Wii conversion was even released. These were solid numbers, but it seemed that the series was experiencing diminishing returns.

The introduction of the HD consoles was an opportune time for a change of approach. Ed intimated that the tentatively titled Mortal Kombat 8 would be darker and grittier, with visuals inspired by Gears Of War. Ed had promised that the team was "reinventing everything from the ground up" in an interview with Game Informer at the time, as "we really think that's needed". That ultimately came to pass, but a licensing deal put it on the backburner while Mortal Kombat Vs DC Universe was developed. The game saw Batman, Superman, Wonder Woman and The Joker doing battle with a selection of the Mortal Kombat cast, and served as a bridge between the 3D fighters and the HD era proper – the fighting still included full 3D movement and arena interaction in the form of mini-segments like Free-Fall, but the fighting style system was out and an excellent new story mode was added, which served to introduce players to the characters. The game was reasonably well received thanks to improved combat mechanics and a compelling story mode, but there was criticism of the reduction in gore and lack of unlockable secrets compared to previous games. The game still sold 1.9 million units within just a few months, but that wasn't enough to save Midway from bankruptcy in 2009.

The Mortal Kombat series was bought by Warner Bros, which also acquired the Mortal Kombat team's Chicago studio. This ultimately became NetherRealm Studios, the developer of the games today. Under this new ownership, the HD era began properly, marked with a 'back to basics' approach that has delivered critical acclaim and strong sales. The cast and setting were both revamped in 2011's Mortal

» Sub-Zero – in his different incarnations – is a series mainstay.

FATAL DISTRACTION

While the main fighting franchise has always done well, Mortal Kombat hasn't always fared well with side-stories

It's fair to say that *Mortal Kombat* spends a lot more time on plot and worldbuilding than most fighting game series. With that in mind, the idea of spin-offs starring popular characters might sound like a good one, but the results have been decidedly mixed. *Mortal Kombat Mythologies: Sub-Zero* was a particularly poor start. Exploring the history of the Lin Kuei assassin prior to the events of the original game, it introduced important storyline characters such as Shinnok and Quan Chi before they appeared as fighters in *Mortal Kombat 4*. Unfortunately, the attempt to mix *Mortal Kombat*'s fighting style with 2D platform gameplay and RPG elements proved disastrous, and the game was reviled by the press.

Mortal Kombat: Special Forces fared even worse. Going back even further in storyline terms, this action adventure followed Jax as he hunted down the members of the Black Dragon gang, who had been freed from prison by Kano. The game suffered from a troubled development marked by multiple staff departures, and Sonya Blade was cut from the project entirely. Reviewers mauled the game, and In a 2008 interview with *GameDaily*, Ed Boon cited it as the only game in the series that hadn't made money.

After two fairly disastrous attempts you'd have forgiven the team for giving up, but *Mortal Kombat: Shaolin Monks* is reason enough to be grateful that they didn't. This beat-'em-up starred Liu Kang and Kung Lao, and mined *Mortal Kombat II* for nostalgic characters and settings. The series' trademark violence was present and correct, and co-operative multiplayer action contrasted well with the competitive nature of the main games, and the game deservedly received a positive critical reception and sold over a million copies. Unfortunately, a sequel starring Scorpion and Sub-Zero was cancelled early in development as the game couldn't be delivered to Midway's desired deadline and budget.

Kombat, in which Raiden sent visions to his past self – allowing the story to reset to the characters and settings of the 2D era. Why did the team go backwards? "The original games are seared into Mortal Kombat fans' memories," according to Ed. "Plus, the team loves to revisit that era." The game's story mode followed the template laid down by Mortal Kombat Vs DC Universe, with each chapter focused on a single character, and this became a staple of the series. Mortal Kombat X was set 25 years later and ensured that some of the newcomers retained connections to the classic characters – Johnny Cage and Sonya Blade's daughter Cassie and Jax's daughter Jacqui being the most obvious. Time is also the theme of the latest game in the series. "MK11 does not return to the past. Rather it brings past characters to the present to meet their older counterparts. This is part of the magic of what happens in the Mortal Kombat 11 story. It's crazy," says Ed.

2011's Mortal Kombat also revamped the fighting style of the series, returning the action to a 2D plane and adding a three-level super move gauge. This enabled the use of enhanced special moves at the first level and combo breakers at the second, but it was the new X-Ray moves that drain a full gauge that proved to be a perfect addition to the series. As well as doing massive damage, they showed detailed injuries in grisly close-up detail – shattered skulls, broken ribs and all. Mortal Kombat X retained them and added interactivity to arenas, with players able to throw or jump off objects from the background. Those changes might seem at odds with the return to fundamentals, but it's business as usual in the context of the series. "Our approach with all the Mortal Kombat games, including Mortal Kombat 11, has been to always introduce a lot of new elements and features – change things up – so the games always feel fresh," Ed says. "This was certainly the approach with MK11.

"We switched our fighting mechanic quite a bit by introducing Krushing Blows, changing the meter so it splits offense and defensive moves, and tying the Fatal Blows to the player's health meter. This has dramatically changed up the pace and tension of the fight," says Ed, explaining the changes in Mortal Kombat 11. "The fighting is closer up which makes it feel even more intense." The two new move types are the most notable additions. "Krushing Blows are ways to dramatically increase the damage certain moves

» [Xbox One] Ronda Rousey provides the voice for Sonya in *MK11*.

» [Xbox One] Of course, Scorpion returns in the latest game.

“The original games are seared into Mortal Kombat fans’ memories, plus, the team loves to revisit that era”

Ed Boon

will inflict and come with a great X-ray looking visual effect,” Ed tells us. “Every fighter has multiple Krushing Blows and each is triggered differently. This adds yet another layer of strategy to the fighting and makes the variety of fights that much less predictable.” Fatal Blows are the new super moves, replacing X-Ray attacks, and Ed is very excited about them. “They are now available when your health meter drops below about 30 percent. This dramatically increases the tension of the fight and changes both players’ strategy once a Fatal Blow is made available. Suddenly you have this crazy powerful move at your disposal, and your opponent knows it!” There’s also a new system of gear – each fighter can equip three pieces which will affect the way they fight.

The NetherRealm team clearly got a taste for crossovers after Mortal Kombat Vs DC Universe, as the HD era has been distinguished by the trend of crossover fighters finding their way into Mortal Kombat. Kratos made the journey from the God Of War series to the PlayStation versions of 2011’s Mortal Kombat, and Mortal Kombat X featured classic horror movie characters as DLC additions – the Alien, Predator, Jason Voorhees, Freddy Krueger and Leatherface. “We always try to have some kind of ‘surprise’ characters for DLC in all of our games. Sometimes those fighters are ‘guests’ from other universes, and sometimes they are returning Mortal Kombat fighters who haven’t been seen in a long time,” says Ed, who also notes “you shouldn’t be surprised to see both in MK11.”

2011’s Mortal Kombat began the series’ return to prominence. Review scores were a good step ahead of Mortal Kombat Vs DC Universe, with GamesRadar’s 4/5 review praising it as “a successful sequel that both reboots and redeems the wayward series.” The game sold close to 3 million copies in four months, and according to Warner Bros covered the entire cost of the Midway acquisition on its own. Mortal Kombat X fared just as well critically, being described as “an accomplished fighter as well as a gruesome theatre of punishment” in Play’s 9/10 review. It did even better than its predecessor at retail, becoming the fastest selling entry in the history of the series by shifting 5 million copies in six months. The HD era has also seen the Mortal Kombat series embraced by the esports scene. The series first appeared as a featured game at the prestigious Evolution Championship Series in 2012, and players such as Perfect Legend and SonicFox have made their names competing in Mortal Kombat. Mortal Kombat 11 should be hitting the shelves about now.

That’s where Mortal Kombat is today. The gore is still there, but the controversy has largely gone – and knowing that notoriety will only get you so far, NetherRealm has refined Mortal Kombat into a game that rivals anything else in the fighting scene. But there’s no sense that the team is resting on its laurels. “I personally believe the series has remained popular because we are not afraid to change things up with each version of Mortal Kombat. Every game has something new to offer fans of the series, and they have stuck by us because of that,” says Ed. “I don’t know many game series that have been around for over 25 years and whose most recent versions have been their biggest sellers.” He’s certainly got a point – and we’ll be fascinated to see the places the series will go with another decade or two of evolution.

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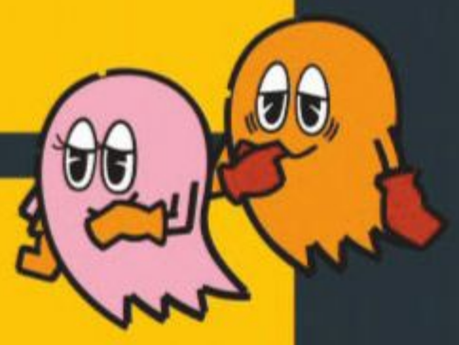

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ULTIMATE GUIDE:

ALEX KIDD in SHINOBI WORLD

Having braved Miracle World, sampled the delights of High-Tech Land and seen the sights of the Enchanted Castle, Sega's mascot headed for the crossover kingdom of Shinobi World. Retro Gamer revisits one of the young prince's greatest adventures

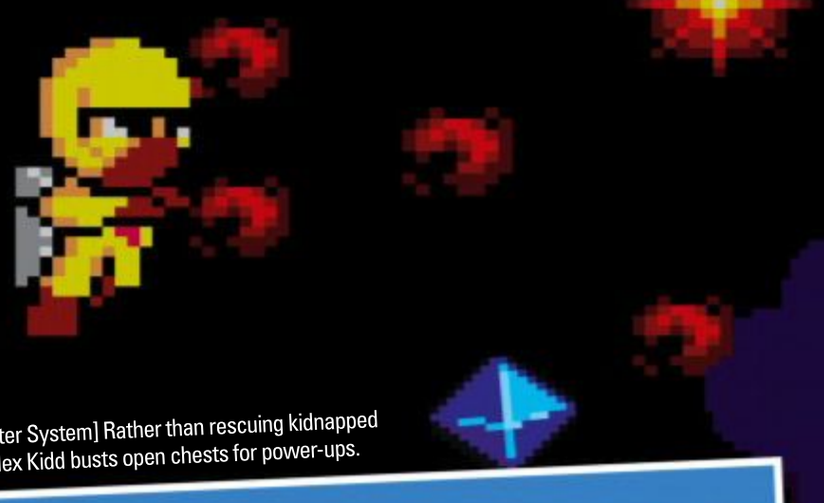
Words by Nick Thorpe

Despite being Sega's featured star of the late Eighties, Alex Kidd definitely managed to benefit from the presence of other properties. Fantasy Zone's Opa-Opa made a cameo in Alex Kidd: The Lost Stars, and the whole of Anmitsu Hime was localised for the non-Japanese audience as Alex Kidd: High-Tech World. He had also made appearances in games such as Altered Beast and Kenseiden. As a result, it was no surprise that the underdog platform hero should end up starring in a proper crossover game – but what was a surprise was just how good it ended up being, especially considering that his Mega Drive debut had been somewhat underwhelming.

Alex Kidd In Shinobi World takes some of the themes and settings of Sega's famous ninja game Shinobi, then applies Alex Kidd's greater emphasis on platform negotiation and family-friendly cutesy looks. Sega chose to explain this odd collision of worlds by having Alex and his girlfriend take a holiday on the planet Shinobi, only for the girlfriend to be kidnapped by the evil Dark Ninja. Fortunately, the White Ninja appears and bestows mystical powers onto our hero, instantly giving him some nifty ninja abilities.

In practice, what this means is that Alex must negotiate four platform worlds, each featuring two stages and a boss fight. These are vaguely themed around Shinobi's stages, but with significant new additions – so while you might find the city streets or the docks familiar, the waterfall and magma caves will be completely new to you. Where Joe Musashi takes things at a relaxed pace and makes very deliberate movements, Alex Kidd is quite nimble and responsive, sporting a range of additional moves that help to differentiate the game from Shinobi. He can swim, climb and perform wall jumps, but the best technique of the lot is a spinning fireball move. By grabbing onto a

» [Master System] It's all sunshine and romance for Alex, until his beloved gets kidnapped by a ninja and he has to rescue her, that is.



» [Master System] Rather than rescuing kidnapped kids, Alex Kidd busts open chests for power-ups.

» [Master System] There's not much room for manoeuvring between these two hazards.

PARODY PANIC

How gaming's most famous plumber nearly ended up in a Master System game

Alex Kidd In Shinobi World went through major changes during development. For a start, it was originally titled *Shinobi Kid* – or *Shinobi Kidd*, depending on which magazine you were reading – and had a main character sprite that looked like Joe Musashi. Graphics data found in the game shows that it was supposed to have at least one extra stage with its own boss, and early screenshots are barely recognisable compared to the final game. But one screen, which is initially pretty recognisable, shows off a cheeky swipe at Nintendo.

When redesigning the fireball throwing samurai boss Ken-Oh, the devs decided to simplify his fireball pattern to a simple arc that bounced off the ground. He'd shrink after taking enough damage, he had a big moustache, and if it wasn't obvious enough who he was meant to be then his new name was listed on the level's title card: Mari-Oh.

Though nobody at Sega has ever spoken about this, we'd imagine that this particular piece of fun was the victim of legal concerns – it's certainly not something that Nintendo would have seen the funny side of, even though it had yet to consider Sega as a serious competitor. But whatever motivated the change, it seems that the decision was one taken at the last minute, as the original title card graphics for Mari-Oh and the early character sprite are still present in the game's data, and can be swapped for the final art with a little bit of simple editing.

BOSS RUSH

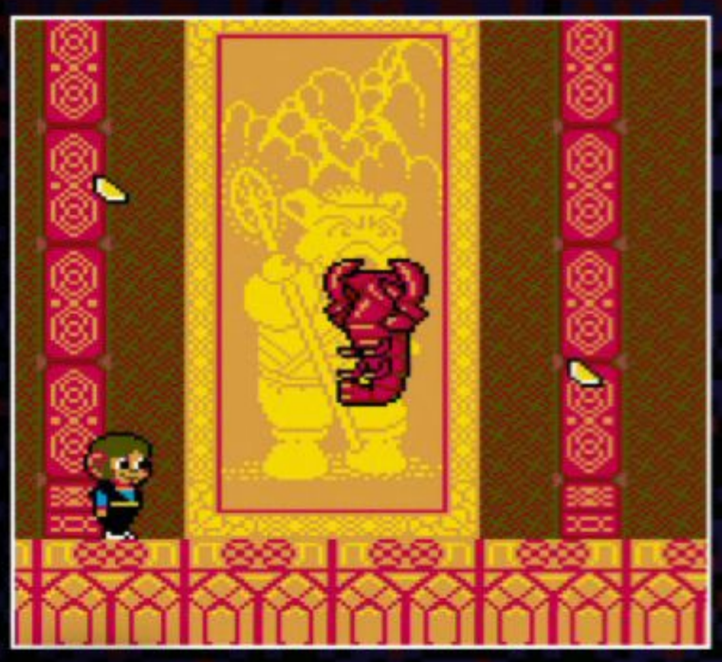
Meet the dastardly villains keeping Alex from his girlfriend, and learn how to beat them

KABUTO

■ This samurai warrior is a lot like the original game's Ken-Oh boss, but he's a bit easier to deal with. The fireballs he throws travel in a very predictable manner, and you can hit him anywhere in the body. After taking a few hits, he'll shrink and start running about a bit faster. If that shrinking seems a bit odd to you, check out the Parody Panic box for more information on why it happens.

HELI

■ Remember the Black Turtle fight from *Shinobi*? This is like that, but instead of a helicopter spewing endless ninjas, it's a version of *Shinobi*'s Mandara robot face that spews infinite tiny helicopters. These fly about the screen in all directions, and you've got to defeat them until the counter at the top of the screen is empty. The best thing to do is to find a corner and just keep attacking.

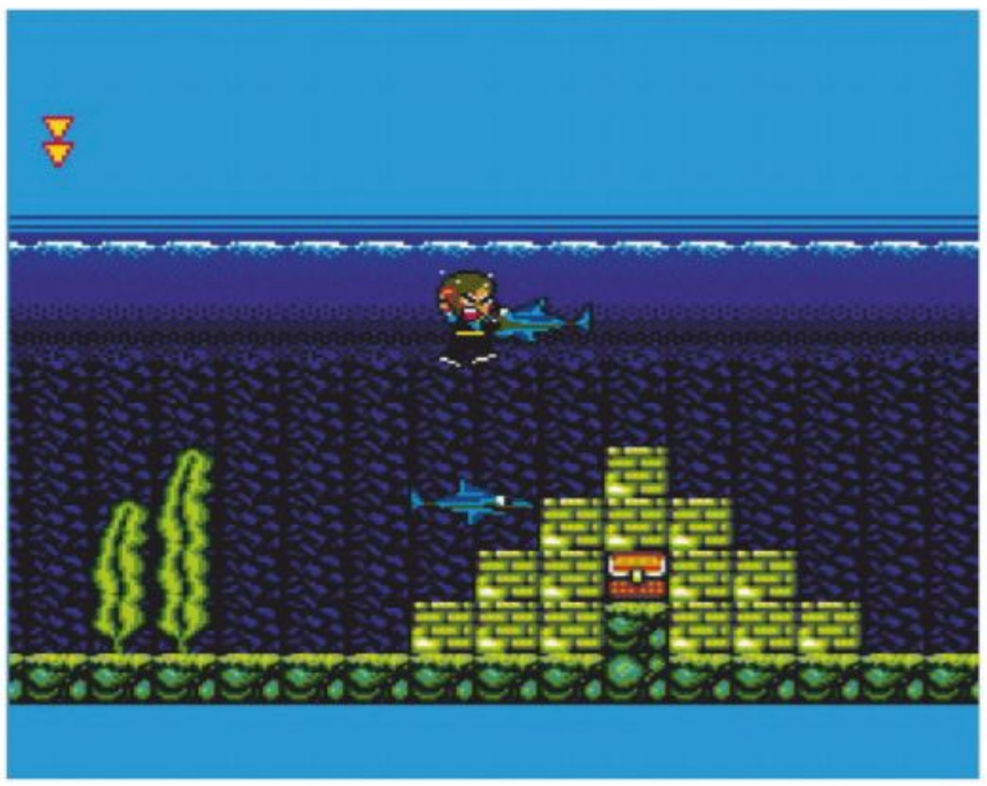


ROBSTER

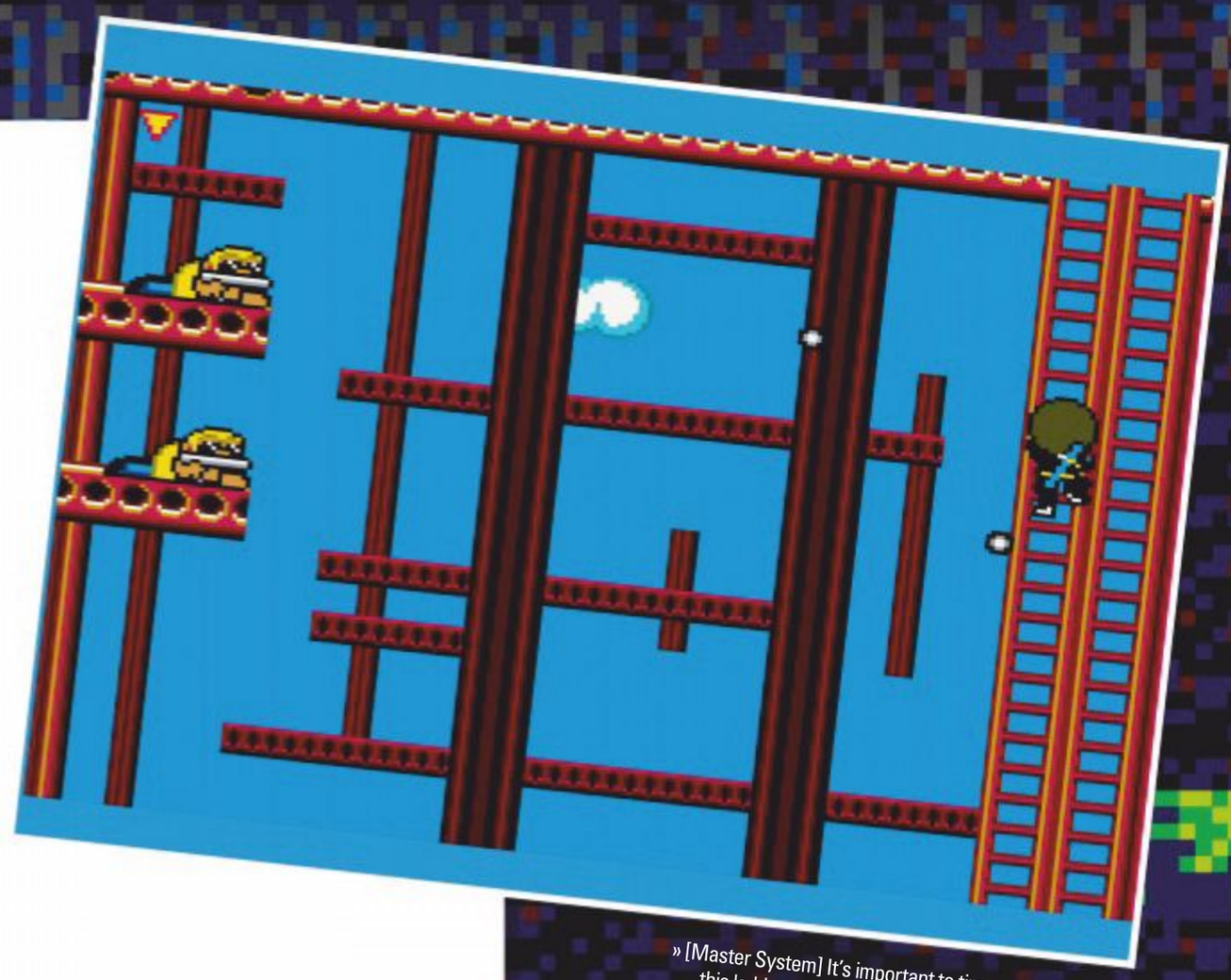
■ In *Shinobi*, Lobster was a samurai who wore red. In this game, Robster is an actual lobster. It stands around and showers projectiles for a bit, then jumps to a new location to start again. Keep your distance while it's attacking, and make sure you attack while it's mid-jump. Once you hit it, it'll be knocked back for the remainder of its fall, so time your hit with the peak of the jump.

HANZO

■ The final boss attacks in three tough patterns. The first sees him jumping about and shielding himself – his shield goes down just before he jumps, so attack then. He'll then turn into a tornado and start firing projectiles. Attack quickly to ensure they're not fired. He'll eventually start attacking with shadow clones. Concentrate on the real Hanzo, only attacking the clones if they get too close.



» [Master System] Ouch! This shark speeds up when our hero is in line with it.



» [Master System] It's important to time your ascent up this ladder well, thanks to the marksmen on the left.

lamppost, rope or anything else he can swing around, Alex can burst into flames and fly off in a straight line, smashing through enemies and obstacles.

What's more, there were plenty of opportunities to use these skills, thanks to some tight level designs featuring some very sneaky hidden areas and neat maze rooms, and difficulty that was never unfair. In particular, the fireball move's utility was maximised by including areas that were impossible to reach without its flying ability. Some of this can be credited to Shinobi's excellent original design, as a number of enemies are inspired by it. But the new designs were definitely a key part of the game's success, too – Yoshio Yoshida, one of the two game designers, would later be involved in other excellent Master System platform games such as Astérix, Castle Of Illusion and Land Of Illusion.

The graphics were drawn by a team including Gen Adachi and the pseudonymous Stresteles, both of whom had previously worked on Phantasy Star II for the Mega Drive and Poseidon Wars 3D for the Master System. They struck a good balance between recognisable Shinobi elements and Alex Kidd's cartoonish style. The enemy ninjas all became large-headed masked types and there were some fun humorous touches included, such as the smiling moon in the background of the Kabuto boss fight and the Thwomp-style crushing blocks late on. Alex Kidd himself was very well animated too, turning in mid-air as he leapt from wall to wall, crying out when attacked and of course, he still floated up to the sky as an angelic silhouette when killed. It was an attractive game by the standards of its time, though later Master System games definitely surpassed it.

Musically, the game offered a range of original themes and new takes on the Shinobi music, which were composed by a developer credited only as XOR. Each of the four main stages shares a theme, all of which sound good, with the best of the lot being the opening stage's brilliantly energetic arrangement of Shinobi's memorable theme. It's a shame that we can't tell what else this person worked on, if anything – their only other credit seems to be for sound programming on Strider's Mega Drive conversion.

Alex Kidd In Shinobi World was in development for at least six months, having been shown off to attendees of the Winter CES show in January 1990, and received a favourable critical reception upon its release in the summer of 1990. Computer & Video Games gave the game 92%, with reviewer Robert Swan saying that although the crossover

» [Master System] Surprise! It's an attack from the depths, from the hidden water-dwelling yellow ninja.

ESSENTIAL ITEMS

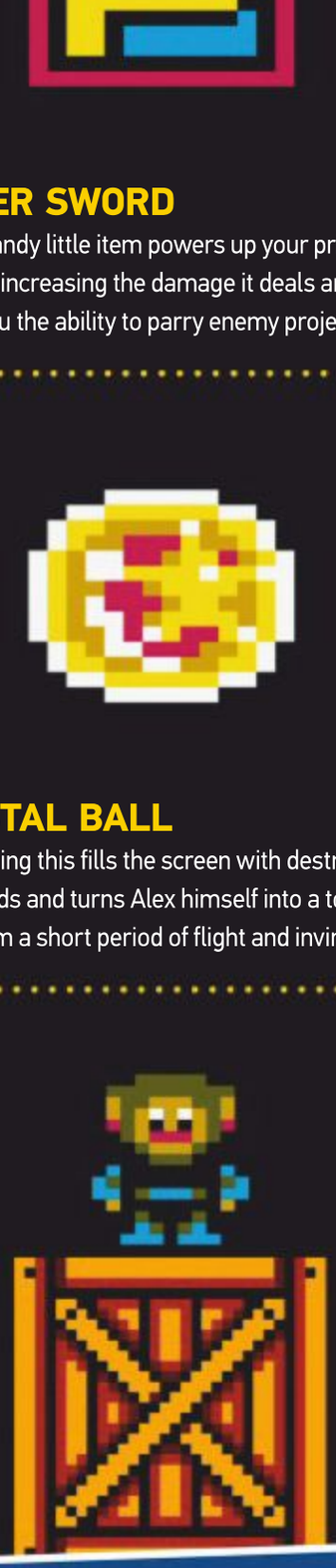
The power-ups you'll need to keep the ninja hordes at bay

POWER SWORD

■ This handy little item powers up your primary weapon, increasing the damage it deals and giving you the ability to parry enemy projectiles.

CRYSTAL BALL

■ Collecting this fills the screen with destructive whirlwinds and turns Alex himself into a tornado, giving him a short period of flight and invincibility.



THROWING DARTS

■ These weapons have all the benefits of the Power Sword, but with the added advantage of enabling you to attack baddies from a distance.

HEART

■ Collect this to gain one hit point. If you've reached the maximum of six, every heart that would appear will instead be an Alex Kidd doll.

ALEX KIDD DOLL

■ Pick up a miniature Alex and you'll get an extra life! That's particularly handy, as it's the only way to get one and you only get a single continue.

» [Master System] Alex uses his fire spin, to make sure he doesn't get got by the swooping bird.

▶ "doesn't exactly bode well for a chop-socky action game", the high quality of all aspects of the game ensured that it was "a great game all round". S: The Sega Magazine scored it 88%, expressing approval that the Alex Kidd series was "back on form", and noting that the game "would have been well into the 90% bracket if it had been a tougher challenge". Sega Pro magazine also awarded the game 88% in the software round-up of its debut issue, saying that there was "so much to do that addiction is guaranteed." While Zero's review was free of any substantial criticism, it also wasn't quite as impressed as other publications, awarding the game 78%. Outside of his original adventure, Shinobi World is generally considered to be the best of Alex Kidd's games.

Sadly though, Alex Kidd's visit to Shinobi World was to be his last starring role. Sonic The Hedgehog launched the next year, and his following explosive popularity sent Alex Kidd and his monkey features back into obscurity. Even as many Master System games were repurposed for the Game Gear, Alex Kidd In Shinobi World was left stranded – its only subsequent re-release was a downloadable emulated version on the Wii Virtual Console service, which is now defunct. Sega's tendency to forget the game might give you the impression that it wasn't particularly good, but those who have played it will know that this couldn't be further from the truth. So if you haven't already had the pleasure of doing so, take the time to pick it up and you'll quickly come to understand why so many players still have a soft spot for Alex Kidd.

» [Master System] Of course, it's a happy ending: Alex overcomes his girlfriend's kidnappers, before thanking his spirit guide for all the ninja powers.

PIXEL PERFECT

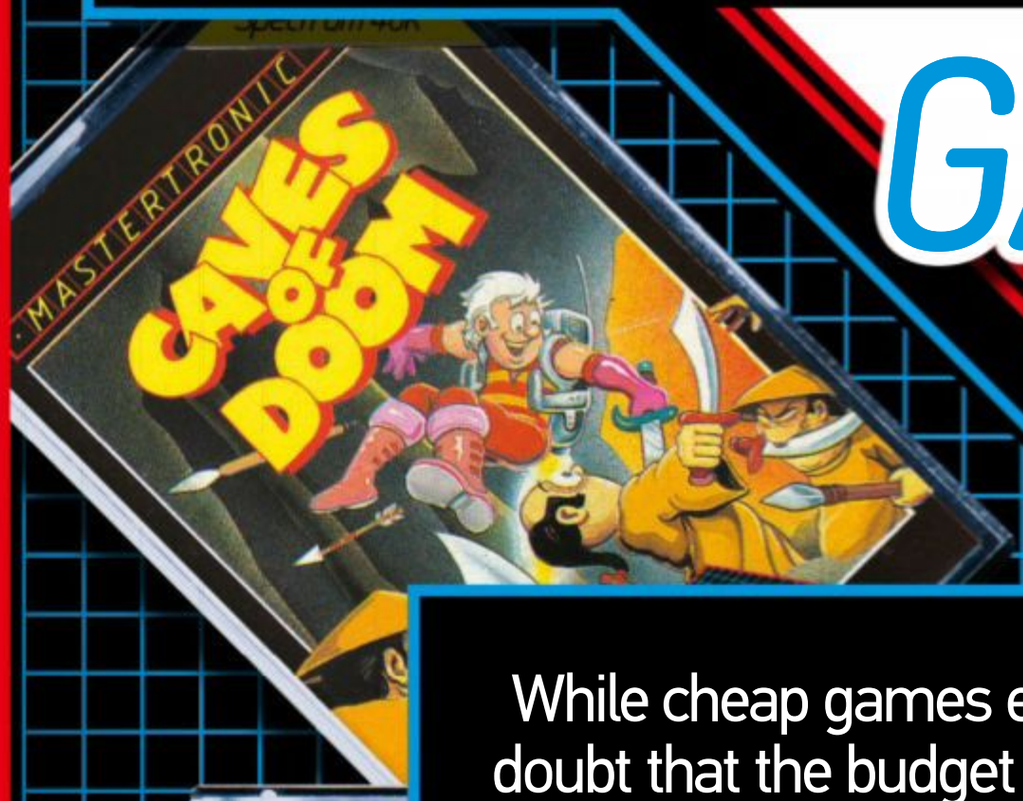
The colourful denizens of Shinobi World

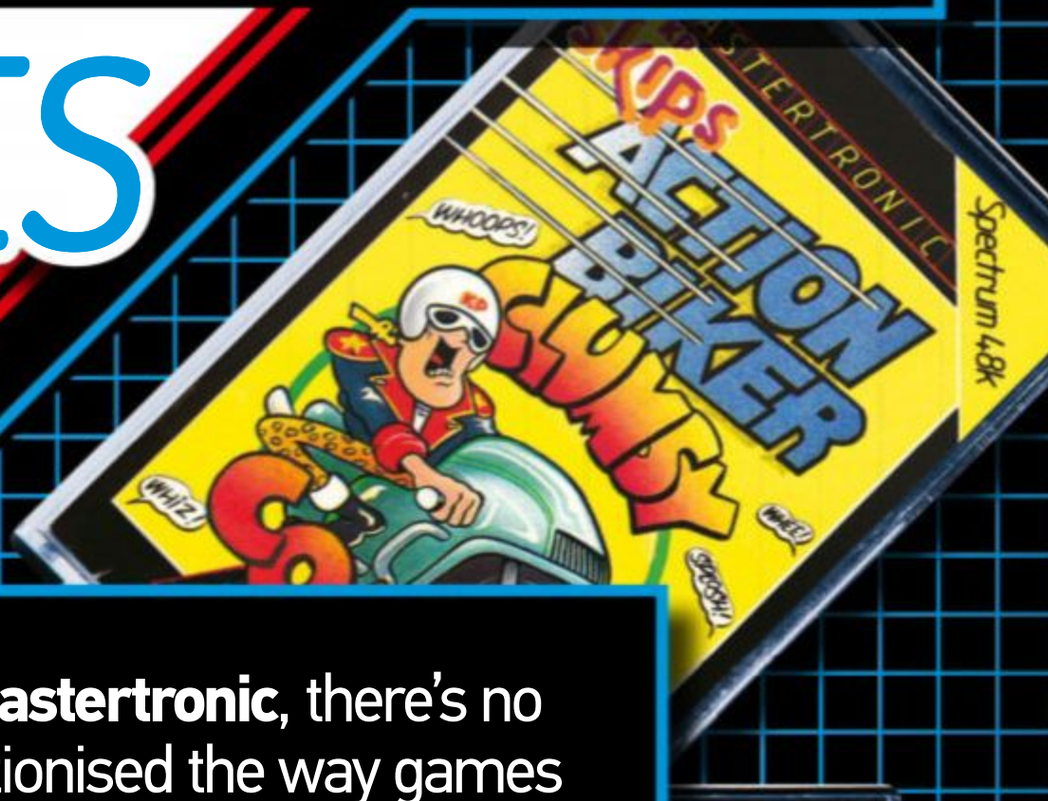
35 YEARS...

35

MASTERTRONIC

GAMES

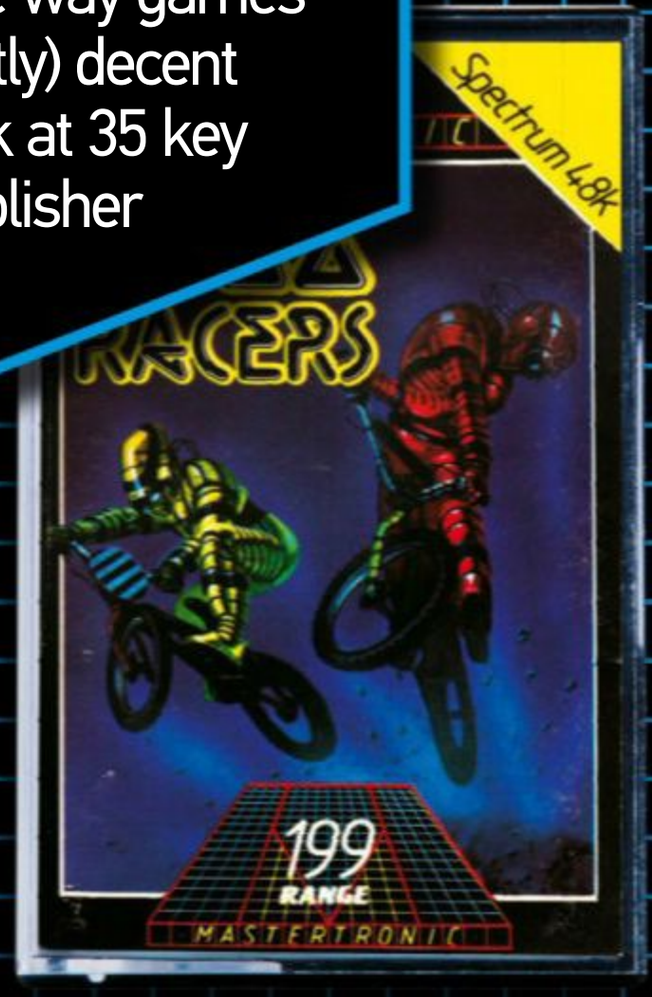




While cheap games existed prior to **Mastertronic**, there's no doubt that the budget publisher revolutionised the way games were sold, while simultaneously offering (mostly) decent games for a bargain bucket price. Here we look at 35 key games that defined the pocket-friendly publisher

Words by Graeme Mason

A three program cassette utilising over 100K of memory



1984 BMX RACERS

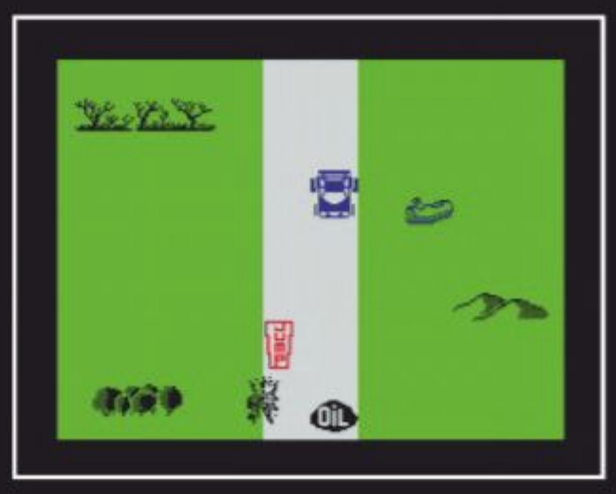
DEVELOPER: DAVID AND RICHARD DARLING **GENRE:** RACING

Galactic Software, AKA the brothers Richard and David Darling, proved useful allies for Mastertronic in its early days. As one of their own games for the publisher, the Darlings sold *BMX Racers* with subsequent impressive royalty payments after it proved to be a surprise smash.

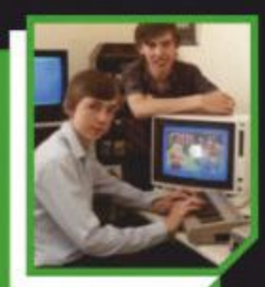
The concept was modest: the player rides and jumps on a BMX in an overhead view, avoiding obstacles in the road as the game scrolls downwards. Graphically sparse and lacking in any real long term staying power, *BMX Racers* became a smash anyway on the back of the BMX craze which was belatedly invading the UK.

This triumph of marketing over anything else struck a chord with the fledgling coders so that when they came to start their own software label in 1987, there was plenty of effervescent promotional prowess to accompany each game. The pair even acknowledged its first big hit for Galactic by releasing *BMX Simulator* for Codemasters, thus instigating a huge line of simulator games. A year after *BMX Racers*, Mastertronic released Commodore 16 and ZX Spectrum versions, ported by other coders as the Darlings focused on their future output. Yet no matter which format you furiously pedalled up the screen on, *BMX Racers* was a knock-out in terms of sales, and a key game in strengthening Mastertronic's position within the software market.

Enthused by its success, the Darlings created a semi-sequel a year later. *BMX Trials* was housed inside another cover by Mark Brady and switches the action to side-scrolling as the player competes against the computer or another player in a series of stunts.



DAVID DARLING



Meet one of the men behind some of Mastertronic's biggest early games

How did your relationship with Mastertronic begin, and how did the arrangement work?

Alan Sharam wrote to us after seeing one of our adverts in a magazine. [...] To begin with, we wrote games for them and they paid royalties. After a while, we were managing most of the development of the games. We were getting other programming teams to do conversions of our games to new formats and also new games. So we decided to set up a development company together called Artificial Intelligence Products Ltd, which we owned 50/50 with Mastertronic.

You eventually split and set up your own budget publisher...

We looked at which Mastertronic games had sold best, and realised it was the ones with popular known themes predating the games, for example *BMX Racers*. We set out Codemasters to only produce this type of game, which is why we ended up with the successful simulator range. But we had enormous respect for Frank Herman and Martin Alper's business skills.

1985 CHILLER

DEVELOPER: DAVID AND RICHARD DARLING **GENRE:** PLATFORM

There are no prizes for guessing which artist and groundbreaking music video most influenced this otherwise unremarkable platform game from the Darling brothers. In fact, the homage to Michael Jackson went a little too far as Mastertronic found itself in hot water for using the theme to *Thriller* in the C64 version of the game.

It is also almost impossible to read the game's introduction without thinking of Vincent Price's ghoulish tone: "The night fills you with untold terror, you fear for yourself and for the woman you love who has been spirited away to the haunted mansion by the ghouls that now threaten you." Mwahahahahaha! Ahem.

Also available on Amstrad, MSX and ZX Spectrum, *Chiller* is a frustrating game with your character having an energy bar and one solitary life with which to negotiate the complex and dangerous levels. The aim is to collect several magic crosses before rescuing your girlfriend on the final screen, and while it employs a lot of trial-and-error gameplay, there are some pretty graphics and a nice tune to keep the player company, even if it sounds nothing like the famous song.

1984 FORMULA 1 SIMULATOR

DEVELOPER: SPIRIT SOFTWARE **GENRE:** RACING

Spirit Software was one of many software houses that struggled to adapt to the fast-moving software market in the mid-Eighties.

With its grandiose plan of a pack-in steering wheel to go with its ambitious racing game, it hardly saw release (if at all) from the original publisher before Mastertronic picked the game up for reissuing, dropping the steering wheel peripheral and helpfully giving advice on how to use a sticky tape reel instead. The game itself was sparse and almost impossible to control satisfactorily using the alternative control method.

While its 3D effect worked reasonably well, there was a crippling lack of variety to what feels like a half-complete and rushed effort. Given the status of Spirit Software, that may well have been the case, although this didn't stop *Formula 1 Simulator* becoming a huge hit for Mastertronic, shifting thousands upon thousands of copies on the ZX Spectrum alone. An action-packed cassette inlay, displaying a level of excitement never seen in the game, no doubt assisted, as did the £1.99 price tag. The C16 version is superior, with a different view and improved control.

1987 KIKSTART II

DEVELOPER: MR CHIP/SHAUN SOUTHERN **GENRE:** RACING

This motocross game by Mr Chip and Shaun Southern was one of Mastertronic's most successful titles. Released in 1985, the first *Kikstart* received rave reviews, which was a rarity in the budget publisher's early days. Yet it was this imaginatively titled sequel that not only improved upon its predecessor but also broke new ground in terms of value for money.

Inspired by the popular TV programme *Kick Start*, the subtly renamed game again follows the show's motorbike and obstacle template as one or two players attempt to complete the course in the best time possible. Shaun teamed up with Andrew Morris to bring lucky *Kikstart* fans the follow-up, featuring improved graphics and the same entertaining gameplay, plus a few tweaks. For example, now the players have a handy speedometer so they can track the speeds required at tricky points, which proves very useful in smoothing over the acute difficult spikes in the original game. And as if the new courses and enhanced play wasn't enough, the game famously includes an expansive course designer that allows players to, erm, design their own courses. While initially a little bewildering, once mastered this construction kit gives players the ability to create their own virtual tracks to challenge friends and the computer.

Wrapped up in a neat £1.99 package, *Kikstart II* represented ridiculous value and notched more favourable reviews, especially *Zzap!64* magazine with an impressive 86% score. Mastertronic made up for the limited release of the original, converting *Kikstart II* not only to the Commodore 64's 8-bit computer peers (and the 128k C64), but also the Amiga, albeit at the slightly-higher price of £9.95.

SHAUN SOUTHERN

Developer Mr Chip contributed many great games to the Mastertronic cause

Do you recall how Mr Chip started working with Mastertronic?

I think Mr Chip had found it hard to sell games at full price, and Mastertronic were offering a deal where you got 10p per game, but promised to sell, and did [sell], a lot of games. I met Frank Herman in London once, but Doug [Braisby, Mr Chip owner] did most of the dealings.

What was it like producing budget games, and how do you look back at the time?

It certainly gave us some income so we could afford to take time to write the *Supercars* and *Lotus* games for Gremlin, so it definitely helped. And it was fun and great to see at one point five of my games in the top ten on Commodore 16. I loved looking for new reviews in the all the mags, I only wish games took a week to write these days!

1984 SPACE WALK

DEVELOPER: DAVID AND RICHARD DARLING **GENRE:** SHOOT-'EM-UP

Another early Darlings effort, this shoot-'em-up received a cassette and disc release for the C64, as well as Spectrum and MSX ports. There are two versions for the C64, the second of which offers greatly improved graphics and sound.

In terms of gameplay, it's a neat little concept, suited to the budget price tag: the player controls a floating space man (complete with jet pack but seemingly afflicted by gravity, which is a bit odd in space) as he attempts to guide numerous errant satellites back to his waiting space shuttle. While the whole experience is somewhat repetitive (including the music), *Space Walk* is fun enough for a short play and as with many Mastertronic games, passable enough considering the game's low price point.

The experience doesn't translate as well to the Spectrum game which dumbs down the graphics and narrows its gameplay field, making *Space Walk* a frustrating experience, and distant from the classic C64 original.

1985 FINDERS KEEPERS

DEVELOPER: DAVID JONES **GENRE:** PLATFORM, ADVENTURE

As Mastertronic broadened its range of titles and steadily rose to prominence as an 8-bit publisher, bedroom coders began to send in their games in droves. One such hopeful was David Jones, and the quality of his first game, *Finders Keepers*, ensured its star would go on to feature in several more amusing and fun adventures.

David's key to success was combining the popular platform genre with a neat menu system that enabled the Magic Knight to pick up items, trade them, combine them and use them to combat the game's many puzzles. Featuring cute and sharply defined graphics, the addition of a central maze adds a variety to *Finders Keepers* that was rarely seen in many full-price releases of the time. And while it's a tough game to complete, it's an absolute joy to play, and one of the cornerstone releases to Mastertronic's amazing sales surge of the mid-Eighties. Ports to the Commodore 64, Amstrad, Commodore 16 and MSX proved just as endearing.

1985 ACTION BIKER

DEVELOPER: UNKNOWN **GENRE:** RACING

The prawn cocktail-flavoured crisps Skips were an unlikely licence for a videogame, and one that shoe-horned in KP's cartoon character Clumsy Colin. Odd origins aside, the game also features two different versions, in terms of both genre and quality.

Using an isometric view, the C64 and Atari games are another example of the simple yet fun budget thrills that Mastertronic offered. Sharply reactive controls, a decent ditty and a varied landscape add up to a notably carefree experience where many players just enjoyed biking around the open levels.

Over on the Spectrum, things are a little different. A claustrophobic and frustrating maze game, the object is to guide Colin around his town and home invade as many houses as he can in order to find the 50 items he needs to help get his friend to the spaceport, all before he wakes from his slumber. Stick to the C64 original.

1985 THE LAST V8

DEVELOPER: DAVID DARLING **GENRE:** RACING

Enthused by the success of its £1.99 range, Mastertronic unleashed Mastertronic Added Dimension (MAD) in a wave of publicity in 1985.

Designed to promote games at the slightly higher price of – steady yourself – £2.99, the theory was that the games would offer more depth, more variety and, you know, just be better overall. Unfortunately, this first release, from a concept by David Darling, failed to ignite much interest despite its apocalyptic *Mad Max* origins.

While the idea for *The Last V8* is a solid one, its implementation leaves much to be desired as wonky, confusing controls render the game difficult almost to the point of being unplayable. A cramped playing area definitely doesn't help things scrunching players into the top half of the screen thanks to an unnecessarily busy and garish HUD.

A fantastic Rob Hubbard tune fails to redeem what was a stuttering start for Mastertronic's new premium range, although it's worth noting as the first of Mastertronic Added Dimension's iconic cartoon cassette inlays, complete with comic book kabooms and dramatic speech bubbles.

1986 ZUB

DEVELOPER: BINARY DESIGN **GENRE:** PLATFORM

Here at Retro Gamer we love quirky games with a sense of humour, and you don't get much quirkier or funnier than the Pickford brothers' *Zub*.

Zub tells the story of, well, Zub, a private in the Zubi army, servant of king Zub, ruler of the Zub kingdom. When sergeant Zub calls Zub in for a special mission, he has no choice but to obey, or be zubbed into oblivion. The green eyeball of Zub has been stolen and traced back the planet Zub 10. To make his way to his destination, Zub must ascend to a series of teleports via floating platforms that can be controlled by crouching – once he's reached it of course.

To deter Zub, security robots of a varying threat level accost him throughout his mission. Fortunately he possesses a useful zub blaster for temporarily zubbing these pesky automatons, but that's about all the help Zub is going to get. Zub is on his own.

As you may have guessed, there's a lot of zub to *Zub*. Jumping up the platforms begins a simple task, but soon becomes trickier as the enemies pester the gangly biped with greater regularity. But it's not just this sweet gameplay that endears Zub. Following an impressive *James Bond*-style gun barrel intro, the Pickfords infused *Zub* with a professional sheen often absent from full-price releases. *Zub*'s energy is represented by his figure, which changes into his skeletal form (complete with stalk eyes) as he takes damage, and the intro screen is a neat mass of glowing green jocularity.

Despite being born from a self-imposed challenge themselves to write a game in a day, the Pickford brothers gave *Zub* a huge amount of polish. And, as an extra, shoot-'em-up *Lightfarce* is included as a hidden Easter egg – what jolly nice fellows.

STE PICKFORD

One half of the legendary Pickford brothers team talks Mastertronic

When asked what his favourite Mastertronic game is, Ste is conflicted. "Personally, *Zub*, as this was the first game John and I worked on together, and the first project John was allowed to design from scratch. We weren't given the extra time we needed to put in all the features we thought the game should have, but I'm still proud of it.

"However... I think *Feud* was the best game we made. This was the first game where we designed the game independently of developing it," Ste continues. "Although I did most of the graphics, John didn't program *Feud*. We designed the game outside work and brought it in. It was separate from our day jobs as developers. Conversely, *Rasterscan* wasn't very good. It was hopefully at least interesting and diverting for a while, and it looked unusual! That was where we started to learn that just designing a game on paper and giving it to the team didn't always work."

Ste is grateful to the budget publisher for the freedom it gave the brothers. "Mastertronic really allowed us to experiment with game design, and that was a really valuable learning experience, setting the tone for the rest of our career."

1985 TUTTI FRUTTI

DEVELOPER: MR CHIP/SHAUN SOUTHERN **GENRE:** MAZE

With the theory that the more systems it released games on, the more games it would sell, Mastertronic proved a solid supporter of the Commodore 16 during 1984 and 1985.

This charming arcade clone was one of Shaun Southern's earliest games for the budget publisher and proved to be an excellent seller on the Commodore machine. A *Mr Do!* clone on face level, Shaun's clever trick was to take the gameplay of the arcade classic, strip it back before combining it with a smattering of other games of the era such as *Dig Dug* and *Pengo*.

The only thing that lets the game down is its incessant tune, which very quickly becomes ever-so-slightly annoying. Still, a grand effort from Mr Chip, and excellent fun for a mere £1.99.

1985 JOURNEY'S END

DEVELOPER: MATTHEW PRESCOTT, C GONSALVES, T EVERSON **GENRE:** RPG

Originally released by Games Workshop, *Journey's End* is a classic example of gameplay being emphasised over fancy graphics, and that effort helps it on reassessment today. Its sparse display echoes the original dungeon-crawl adventure *Rogue*, and it contains all the depth and more of that Unix-based classic.

Published under the short-lived Master Adventurer banner, *Journey's End* is a quest for the Elixir Of Hagar, a mystical potion that forms part of a demonic ritual and can help cure your father of a curse known as hell-fever. A whole wagonload of gold and treasure could be yours in its pursuit, although the first task is to escape a grimy dungeon, acquiring gold, killing rats and avoiding sudden death occurrences. Then it's time to assemble a party and start the mission proper. Incorporating a pleasant variety of puzzles, role-playing elements and even arcade-style minigames, *Journey's End* is a fantastic experience for those prepared to see past its rudimentary graphics, and insanely good value for money.

1984 DUCK SHOOT

DEVELOPER: MR CHIP/SHAUN SOUTHERN
GENRE: SHOOT-'EM-UP

Despite being a copy of the shooting games you'll encounter in carnivals, there's plenty to admire in this early Shaun Southern VIC-20 and Commodore 64 game, and despite its name, there's lots to shoot other than the titular avian. With the coder ensuring what little gameplay there was works well, *Duck Shoot* delivers admittedly short-term thrills, but for just a penny shy of two pounds, not many people complained.

1986 SPELLBOUND

DEVELOPER: DAVID JONES
GENRE: ADVENTURE

The second in the *Magic Knight* trilogy transformed the template of arcade adventures, and ramped up the level of expectation for budget games. *Spellbound*'s big, bold and colourful graphics and pleasing selection of taxing puzzles is perfectly complemented by the Windowvision menu system that makes the whole game a pure pleasure to play. Mix in its author's trademark sense of humour and you've got a budget smash for just £2.99.

1986 VIDEO MEANIES

DEVELOPER: TONY KELLY
GENRE: SHOOT-'EM-UP

This fine little shoot-'em-up saw action on the Commodore 16 and Commodore 64, the latter scoring 71% in *Zzap!64* with its neat and tight corridors offering some frenetic shooting action, combined with the regulation robust sound effects and jaunty tune. Unremarkable, but as usual, good value for Mastertronic's low price, and the C16 game is also pleasantly diverting for undemanding gamers.

SCORE 000000 : 9321 TIME
AUTOMATIC FUNCTION ENGAGED
FOUR OR MORE RAMBOIDS MUST BE INSTALLED IN THE CORRECT ORDER TO ENTER THE NEXT LEVEL

1985 ONE MAN AND HIS DROID

DEVELOPER: CLIVE BROOKER
GENRE: MAZE/SHEPHERD SIMULATOR

The 'one man' of the title could well have been Clive Brooker, who also created *Empire Fights Back* which also shifted a huge amount of cassettes for the Spectrum. *One Man And His Droid* is a difficult one to get to grips with, but for those who persevere in shepherding around the ramboids, there is a gem of a game to be found here.

1986 GHOSTBUSTERS

DEVELOPER: DAVID CRANE/ACTIVISION
GENRE: ACTION

With some of Mastertronic's earliest games coming from third parties (such as Spirit Software's *Formula 1*), it seemed logical to create its own sub-label dedicated to old games given a fresh lease of life with a sparkling new budget price. Activision's famous film licence was one of the first titles to get the Ricochet treatment and a predictable massive seller. The game itself is a decent enough recreation of the classic sci-fi comedy.

1985 CAVES OF DOOM

DEVELOPER: MR CHIP/ROBERT SANSOM
GENRE: PLATFORM

Another brilliant cartoon cover from artist John Smyth disguised what was a rather drab platform game from Mr Chip that holds more than a passing resemblance to *Jet Set Willy*. Using a jet pack, the player can nimbly negotiate each screen, but enemies will follow our hero. It has the usual Mastertronic value-for-money factor, but boy, that Amstrad version is tough on the eyes.

1986 UNIVERSAL HERO

DEVELOPER: STUART MIDDLETON/XCEL
GENRE: ADVENTURE

Along with a bunch of friends, Stuart Middleton created *How To Be A Hero* and this fantastic adventure for Mastertronic in the mid-Eighties. *Universal Hero*'s quaint graphics and gentle line in undemanding puzzles and gameplay are only undermined by its patchy latter stages where much of the logic seems to go out of the window. Still, it's well worth investigating.

1987 CHRONOS

DEVELOPER: THE RADICAL TUBES
GENRE: SHOOT-'EM-UP

Without doubt the most notable thing about this game is its fantastic music by Tim Follin, and a high score table that, echoing the spirit of Design Design, gives amusing responses to rude inputs. Otherwise, *Chronos* is a run-of-the-mill Spectrum shoot-'em-up that spawned an inferior Amstrad port. But that music, Tim Follin's ability to coax guitars, drums and chords from the Speccy speaker is a miracle.

1986 KNIGHT TYME

DEVELOPER: DAVID JONES
GENRE: ADVENTURE

Magic Knight took to the stars in the third episode of their madcap adventures. The game requires the player to solve many puzzles in order to guide the metal-suited hero back through to their own time. *Knight Tyme* is excellent, with engaging graphics complementing the puzzling perfectly. For Spectrum 128k users, there is also a lovely tune by David Whittaker.

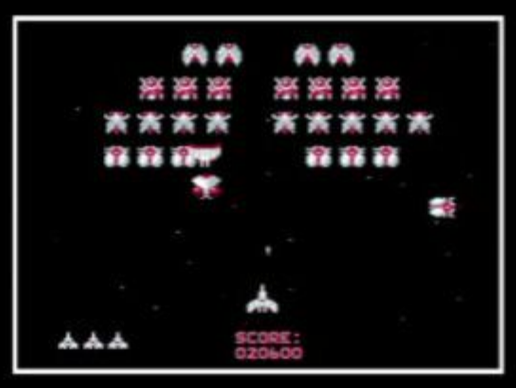
1988 GAPLUS

DEVELOPER: DIGITAL DESIGN **GENRE:** SHOOT-'EM-UP

By 1988, even Mastertronic was dabbling in arcade conversions, usually with satisfying results such as this. Adapting this relatively obscure sequel to the famous Namco arcade game *Galaga*, Digital Design produced a smooth and exciting shoot-'em-up that reaffirmed the fun of the original game.

Again, a race of aliens is threatening the Earth and it's up to you to jet across the galaxy and wipe them out. Its hook is the weapon upgrades that Gaplus motherships drop, increasing your fighter's firepower or freezing the enemies in their tracks. With the standards of graphical excellence having been pushed many times on the C64 by 1988, *Gaplus* didn't initially stand out. However, its charming retro gameplay endeared it to many reviewers and fans, especially for the usual Mastertronic bargain price.

The first of many successful games by the development pairing of Ashley Routledge and David Saunders, *Gaplus* is a spirited game, almost totally defining the perfect C64 budget game: cheap, cheerful and utterly disposable.



STEPHEN CURTIS

On unpronounceable names and successful games

Stephen remembers his first dealing with Mastertronic well. "I submitted a game tape, which was accepted," he explains. "There was an advance payment on royalties and 10p on units sold, paid quarterly. I dealt with John Maxwell, and worked in the Mastertronic offices for several months, appraising tapes coming in and coding my stuff.

"They were nice, open-plan offices and they had a pinball machine that was used quite often," Stephen continues before telling us about his debut title. "*Nonterraqueous* was my first game. I made the name up: 'non' is not, 'terra' is earth and 'aqueous' is sea – so set on an alien planet, not of earth and sea. I think it was one of my better efforts and they loved the name. *After Soul Of A Robot*, The Darling Brothers made a nice offer for *Nonterraqueous 3*, *Terra Cognita*.

"I went back to Mastertronic for *Dr Jackle And Mr Wide* and *Into Oblivion*, but the titles were better than the games! I always liked making up good game titles."

1985 NONTERRAQUEOUS

DEVELOPER: STEPHEN CURTIS
GENRE: ADVENTURE

Stephen Curtis eventually began working at Mastertronic's office, but first he submitted this and its sequel *Soul Of A Robot*. *Nonterraqueous* presents a stiff challenge, and map-making is essential. Released in 1985, it marked a steady improvement in the quality of Mastertronic output, especially on the ZX Spectrum. And talking of classic computers, conquering the many screens of *Nonterraqueous* puts you face-to-face with that irrepressible AI at the heart of your troubles: a ZX81!

1986 AGENT X

DEVELOPER: SOFTWARE CREATIONS
GENRE: MIXED

Developed by the brothers Tatlock, *Agent X*'s multistage gameplay, offering an unprecedented variety for £1.99, proved to be a major hit both critically and commercially.

Separately, all four stages are a little on the bland side, but together they proved excellent value, coupled with another fantastic Tim Follin ditty on the title screen.

1986 NINJA

DEVELOPER: SCULPTURED SOFTWARE
GENRE: BEAT-'EM-UP

Entertainment USA was another Mastertronic sub-label experiment, designed to take advantage of the best from American coders. *Ninja* was the brainchild of Sculptured Software, operating out of Salt Lake City, and the team behind the original C64 game. Despite some poor reviews, *Ninja* offers considerable excitement for beat-'em-up fans, and is at least easy to get to grips with as despatching its enemies seldom becomes onerous.

SIMON WHITE

The author of Jason's Gem talks Mastertonic

"With my growing knowledge of assembly I was keen to tackle a slightly more ambitious project and see whether I could write a game that was saleable. At the same time the market was starting to mature where most major releases were written by small teams.

"When Mastertronic was launched, I realised their approach was different, so I wrote to them with some code samples. I was delighted when they responded positively and soon afterwards my sliding block puzzle game, *Hotch Potch*, was released. [...] I also wanted to write a game that was fun to play but did not involve killing to score points. My contact at Mastertronic was John Maxwell. On my first visit there he asked me about my development environment, and when I said I was using a black and white television, he arranged for an advanced payment of royalties so that I could buy a colour television."

1985 JASON'S GEM

DEVELOPER: SIMON WHITE **GENRE:** PLATFORM

"The epitaph inscribed on poor Jason's tomb, does not speak of his eventful life, but of his careless doom." So begins *Jason's Gem*, the second game by Simon White for Mastertronic (the other being puzzler *Hotch Potch*), and his last, as the coder left games development.

For many, *Jason's Gem* is a peaceful little tale that brings back many fond memories. The game has two stages. In the first, Jason pilots his space vehicle onto a platform before descending the caves, shooting any obstructions out of the way. The second segment is a solid platform game with Jason's goal, the mystical gem, awaiting him after ten screens of jumping and dodging action.

Jason's Gem is far from the best Mastertronic game, but its variety endeared it to many. Each cave offers a stiff challenge, meaning that even with only ten screens, it's likely to take some time to get your hands around that shiny stone.

1987 LA SWAT

DEVELOPER: SCULPTURED SOFTWARE
GENRE: RUN-AND-GUN

Of course, Mastertronic still released a few clunkers, even after it had become so successful in the mid-Eighties. With vertically scrolling run-and-gun games proving popular, *LA Swat* attempts to tap into the genre and fails quite miserably thanks to vapid gameplay and some terrible graphics. A slow perpetual shooting trudge of boring gameplay.

1985/6 KANE

DEVELOPER: JOHN DARNELL
GENRE: ACTION

Originating on the C64, *Kane* was popular enough to inspire a sequel and conversions to the Spectrum and Amstrad CPC. A bird-shooting bow and arrow competition and a dash alongside a speeding train both feature before the final High Noon-esque shoot-out at the town of Kane. Coder John Darnell followed up with the sequel in 1988.

1987 COLONY

DEVELOPER: ICON DESIGN
GENRE: MAZE

The world is chronically overpopulated and the only option left for mankind is to pack its bags and head off to the stars. Taking control of a droid overseer at one such colony, it's your job to repair fences, keep supplies topped up and repel the indigenous insect species. Colony is a novel concept that doesn't quite gel, but it's worth exploring if you're after something different.

1987 FEUD

DEVELOPER: BINARY DESIGN
GENRE: ADVENTURE

With its picturesque and rustic display, there's certainly much to initially love about *Feud*. And fortunately the game itself is also a delight, as the player takes on the role of Learic, brother of Leanoric whom you are pitted against in a magical battle to the death. But first you must gather the herbs necessary to make your spells, resulting in a dash across the land while avoiding your sibling. While many noted *Feud*'s lack of variation, it's a smooth arcade game that offers superb value and kicked off Mastertronic's 'Best Of British' Bulldog label in style.

1986 180

DEVELOPER: BINARY DESIGN **GENRE:** SPORTS

The pub pastime surfaced again on home computers thanks to the Pickford brothers who injected this entertaining interpretation with a degree of their usual wacky sense of humour. WATCH! As Jammy Jim sinks dart after dart into the triple 20. HOWL! With laughter as the dog pees up the bar. The game itself is pretty good, too, with its ethereal hand floating around the screen as the player attempts to beat a series of tough opponents. Darts may be an odd choice for a videogame, but the Pickfords certainly made it fun.

1987 MOTOS

DEVELOPER: BINARY DESIGN **GENRE:** ACTION

Yep, even Mastertronic could do arcade conversions, and do them well, as this, *Gaplus* and *Bosconian '87* prove. All are excellent games, although *Motos* just edges in our list due to its original nature. The aim of the game is to 'bump' the opponents off each checkerboard level using your own eponymous bumper car. There are power-ups galore and a range of enemies, and the game has all of the instant arcade playability you'd expect. It was a success on all three of the formats it released on.

1987 MILK RACE

DEVELOPER: ICON DESIGN **GENRE:** RACING

Those of us of a certain age will remember the Milk Race, a 1,000-mile cycle race from the northeast of England down to the streets of its capital city. The race is actually a version of the Tour Of Britain (which still exists today), and famously sponsored by the Milk Marketing Board until 1993. At the time a strictly amateur event, in 1987 Mastertronic licensed the name for use in a computer game and appointed its close developer Icon Design to turn in a game based around the race.

After an initial map of the route, the player takes control of their bike across a horizontally-scrolling road littered with rival cyclists and other dangers.

While graphically acceptable enough, *Milk Race*'s abstruse controls and unfair difficulty (a nudge from an opponent always leaves you sprawled on the ground while they speed off away from you completely unharmed) unfortunately combine to make it one of Mastertronic's more disappointing releases, despite its intriguing origin story. And that's a shame because there are some appealing ideas, such as the different gears and gradient, but it just doesn't do the basics well enough.

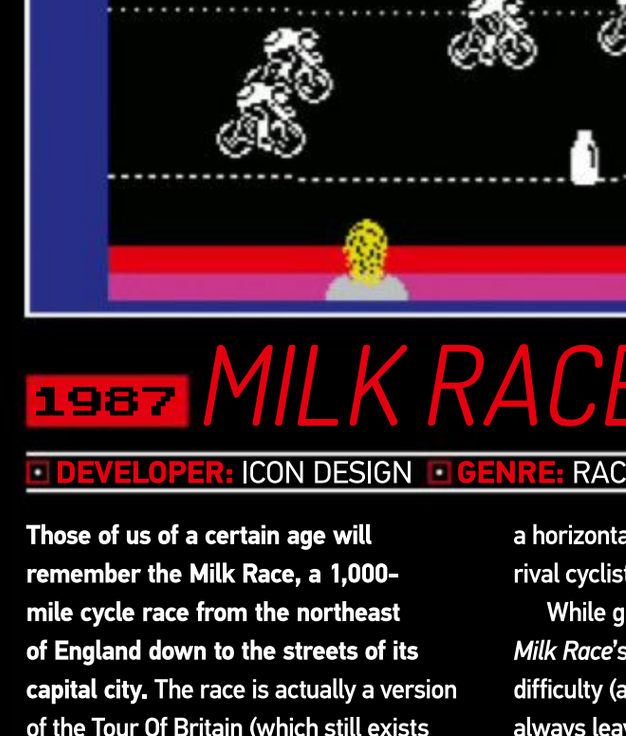
1990 DOUBLE DRAGON

DEVELOPER: MELBOURNE HOUSE **GENRE:** BEAT-'EM-UP

Rereleased by Mastertronic Plus, then Tronix, it's fair to say that the budget software house was keen to maximise profits from one of its most well-known and popular properties. The original arcade version of *Double Dragon* had been a massive hit in the mid-Eighties, spawning a franchise that's still fondly remembered today.

When Melbourne House acquired the right to publish home computer versions, the results were a little patchy to say the least, with the Commodore 64 port in particular receiving a strong salvo of criticism from gamers and critics. Things aren't much better with the Amstrad version (which suffers from slow, interminably gameplay) or the Spectrum port (a mass of ill-defined and indecipherable graphics) but naturally none of this stopped these versions of *Double Dragon* selling thousands of copies at £10 a time, before selling thousands more under Mastertronic's aforementioned budget labels.

Most notoriously, the Commodore 64 version's instructions even include a semi-apology from its programmers, lamenting the limits of the version's host computer and the sprite stacking technique that the team had to use to combat these constraints.



1987 AMAUROTE

DEVELOPER: BINARY DESIGN
GENRE: ADVENTURE

Most noted at the time for its music, *Amaurote* is an isometric arcade adventure that in truth is nothing much more than a simple-'em-up. But it's a beautiful game, until you have a peek at the C64 version. For some reason the isometric display was jettisoned in favour of an overhead view that, while containing the same insect-repelling plot, pushes the game into below-average status. Back on the Atari, Spectrum and Amstrad the use of bouncing bombs is novel, but frustrating. Still, there is much to explore and love about this classic.

1987 WAY OF THE EXPLODING FIST

DEVELOPER: BEAM SOFTWARE **GENRE:** BEAT-'EM-UP

The legendary beat-'em-up from Melbourne House had done the numbers before Mastertronic absorbed the Australian Software house into its empire. Yet repackaged into its Ricochet label for £1.99, the budget publisher gave the old girl a new lease of life, shifting thousands more copies to that apparently large number of home computer owners who didn't already have *Way Of The Exploding Fist* on their shelves. It's actually incredible to think that there would still be gamers out there who hadn't experienced Beam Software's game as it really was big news at the time of its original release. It offered an authentic scoring system, there were a large number of moves to pull off, from flying kicks to brutal punches, and the animation was absolutely superb.

The difficulty level was perfectly pitched as well, ensuring that it would take a good amount of time before you defeated every adversary. Ultimately, it was the fantastic multiplayer aspect of *Fist* which made it so much fun to play and added to its longevity. Granted, Mastertronic had a fight on its hands with the superior *IK+* being released in the same year, but from a budget perspective, *Fist* still ruled supreme.

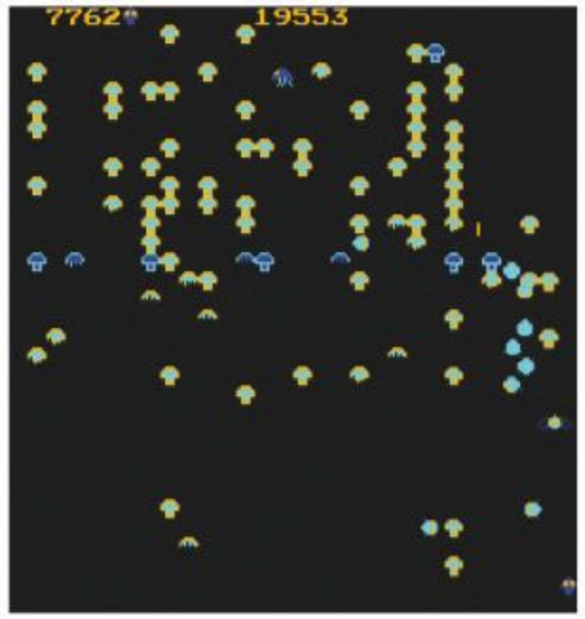
Centipede

» **DEVELOPER:** Atari, Inc » **YEAR:** 1981

Whenever we think about the 'Golden Age' of arcade games Centipede is always one of the first titles that comes up. Everything about it screams 'classic', from its stylish control system to its sensational-looking artwork. It really is a glorious looking game, and an iconic one at that.

The most obvious thing that separates Centipede from similar shooters of the time is that it uses a trackball to control your avatar, which allows you to move incredibly quickly across the bottom third of the screen. Designed by Dona Bailey and Ed Logg, Centipede's trackball is crucial to the game's success, as anyone who has played many of the home conversions will attest. It allows you to cover the screen with the deftest of rolls ensuring that those pesky garden pests never stand a chance. It's only downside is a single fire button on the left-hand side of the trackball, which means the game can be quite challenging for left-handed players (Darran uses the crossed arms technique).

Centipede's trackball is only part of its charm, however. Its striking artwork is arguably just as important as its distinctive control system, delivering vivid imagery that was a world away from the space themes of the time. The gigantic centipede remains as terrifying to look at as it did in the Eighties, giving you your first idea that Atari's formidable shooter wasn't necessarily going to be an easy challenge.

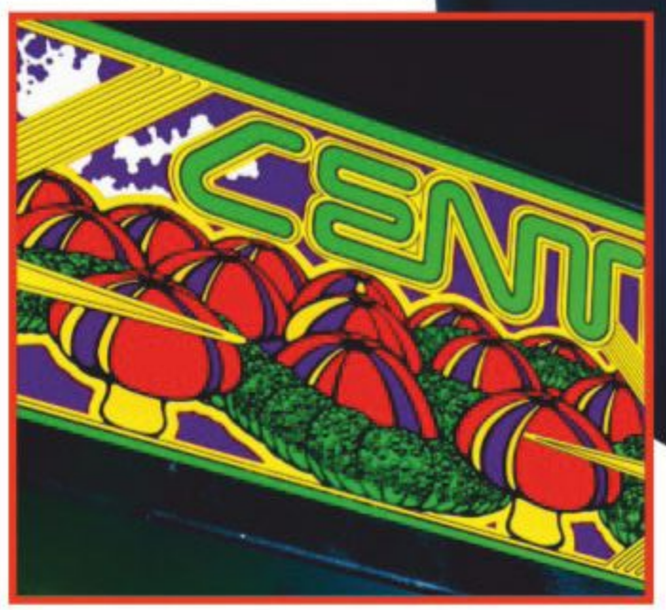


STANDOUT MOMENT
Tunnel vision

You won't clear a level of Centipede until you've killed the centipede found on each stage. That's easier said than done, however, as the multisegmented beastie will begin to split up upon being shot and will often head off in a completely different direction to the rest of its body. Mushrooms are your friends in this tough scenario, as it's possible to blast through them to create distinctive tunnels that will then trap your dangerous foe. Once you've funnelled your foe into an enclosed area, you can hopefully take it apart segment by segment. There's nothing more satisfying that creating a carefully constructed tunnel and then watching in delight as the entire creature gets ripped apart in a manner of seconds.

Centipede fact

■ Atari's shooter was so successful that it inspired countless clones on home systems. *Bug Attack*, *Caterpillar*, *Mushroom Alley*, *Wiggle Worm* and *Megapede* were just a few of the more notable ones.



SYSTEM SUPPLIED BY **ARCADE CLUB**

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THE EVOLUTION OF Paradroid.

Arguably, the C64's finest moment, Andrew Braybrook's Paradroid took inspiration from his earlier title Survive and influenced Steve Turner's Quazatron, Ranarama and Magnetron before being adapted for 16-bit systems, as the developers explain

Words by Rory Milne

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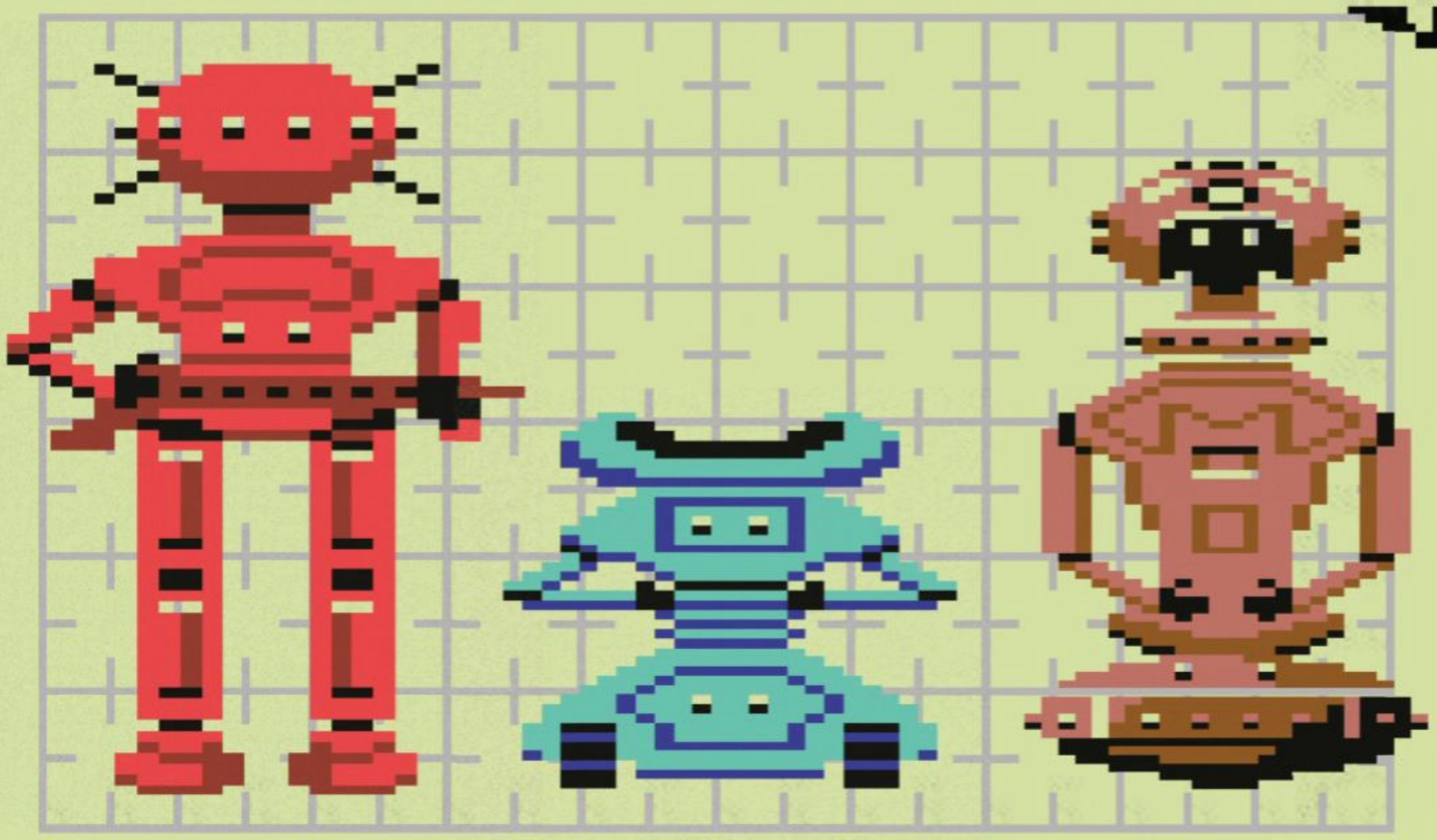


Accountancy packages and videogames are about as far apart as computer-based experiences get, but during the early-Eighties Andrew Braybrook found himself coding both after leaving school and working for the electronics firm GEC Marconi. However, Andrew's games development was unpaid, took place after-hours and didn't interfere with his day job, which likely explains why his employer tolerated it. "It was one of those offices that cleared pretty quickly at going-home time, and there were many long dark nights where I stayed behind," Andrew remembers. "One of the development managers worked a bit later and saw what I was doing, but no one seemed to mind. The security guard used to patrol around at about 10pm, and then I knew it was time to go home, get some kip and be back for the 8:30am start!"

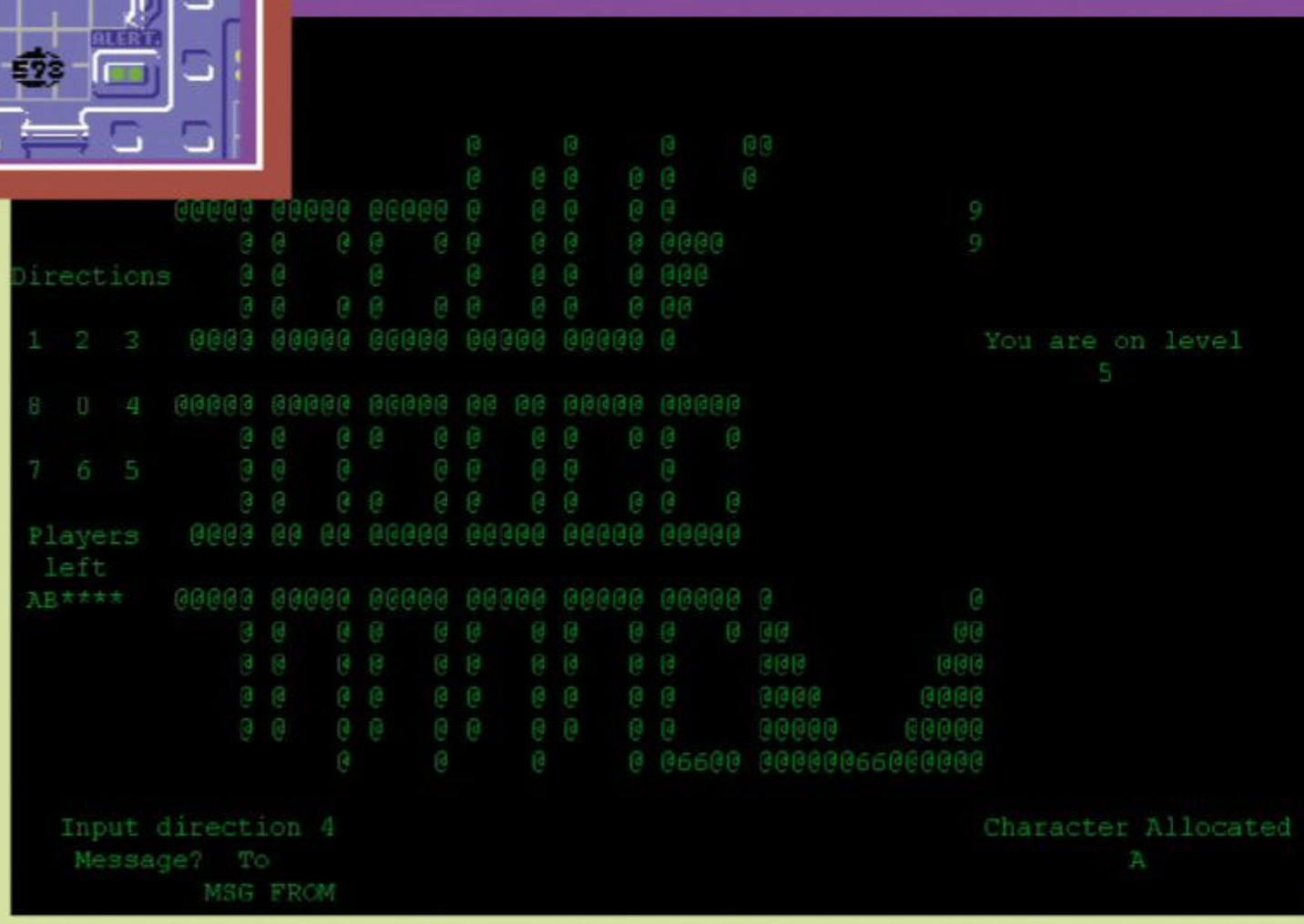
One of the young coder's late-night efforts that went down particularly well with his colleagues was Survive – a six-player, ten-level fight to the death that incorporated two CPU-controlled assassins. "We had six terminals in the main room, so a six-player game seemed right," Andrew reasons. "There was no shortage of volunteers to test it! The original game was six levels of a building, with portals between the levels. The initial idea was to drop six players randomly into the levels and they would all try to be the last survivor. Slowly, I expanded it to ten levels. The players could input directions to move, and they could type an X anywhere on their level to fire at. I then added up to two assassins that tried to chase down the players. They followed hidden patrol routes around the rooms, and would then chase a player if they spotted them."

Far from a mindless shoot-'em-up, Survive included an ingenious mechanic where opponents couldn't be seen when behind walls, although one player found a workaround. "Players could only see other players by line of sight," Andrew explains, "so shooting at empty space seemed pointless. My colleague Splodge, though, was being very successful and we couldn't work out why. Then we found out that he was placing lots of Xs all over the screen, and my game was just taking away the first one each cycle, and not clearing the others. So he'd effectively invented his own machine gun! "

» The original brief Steve Turner gave Andrew Braybrook for *Paradroid* was to make a game with 'cute robots.'

» Unlike his other games, Andrew Braybrook devised the gameplay for *Paradroid* in a single night.

» [IBM Mainframe] The 'lights out' mechanic in Dalek Hunt allows the game's foes to hide in the dark.

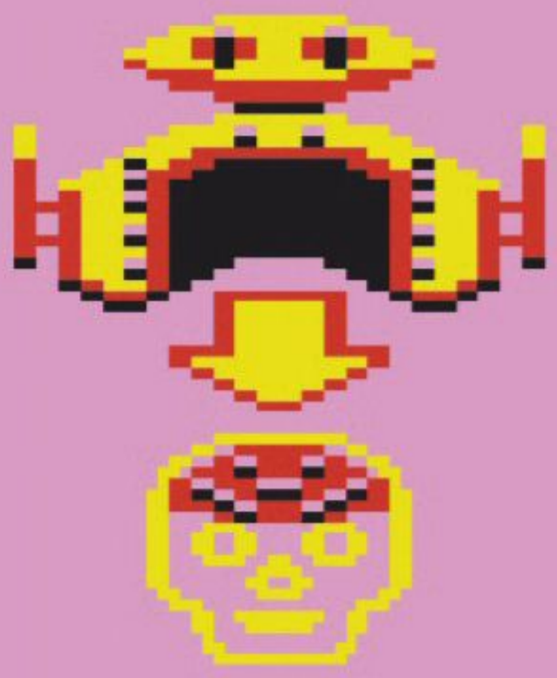


» [IBM Mainframe] Paradroid's line-of-sight mechanics were first implemented in the multiroomed levels of *Survive*.

> "We had six terminals in the main room, so a six-player game seemed right. There was no shortage of volunteers to test it!"
> Andrew Braybrook

Cheating aside, Survive was enjoyed by both its author and his colleagues, but its core mechanics reached a wider audience two years after Andrew left GEC Marconi to join his friend Steve Turner making commercial games. "Paradroid was one of those rare games where the whole game concept was invented in one night and not changed much in implementation," Andrew says of his second original C64 title for Graftgold. "It was Survive from the assassin's point of view. And as everyone was out to get the assassin first, the player needed lots of robots to transfer to."

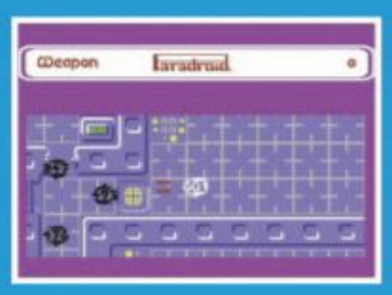
The sub-game that Andrew devised to facilitate this second aspect of Paradroid would ultimately define his game, as well as being its greatest



STAGES OF EVOLUTION: Last man standing

From decommissioning droids and dispatching druids to pulverising pirates

PARADROID



■ Where Andrew Braybrook's mainframe title *Survive* challenged multiple players and two CPU-controlled assassins to fight to the death across ten levels, *Paradroid* tasks solo players with clearing ships full of droids, deck by deck. Both games involve blasting and ramming into foes, but *Paradroid*'s weapons are upgradeable.

RANARAMA

■ As with the droid-infested ship decks in *Paradroid*, *Ranarama*'s levels have to be cleared of opponents, but you only have to dispatch the Wizard and Necromancer bosses in Steve Turner's dungeon-crawler. Taking out *Ranarama*'s lesser foes does net you points, but their demise isn't integral to completing the game's stages.

PARADROID 90

■ The 16-bit adaptation of *Paradroid* retains the original's deck-clearing objective, but the droids you can take over in *Paradroid 90* boast far more eclectic weapons, which broadens the scope of the in-game combat. In addition, *Paradroid 90* beams in crews of ruthless pirates if you're too slow in clearing ships of droids.

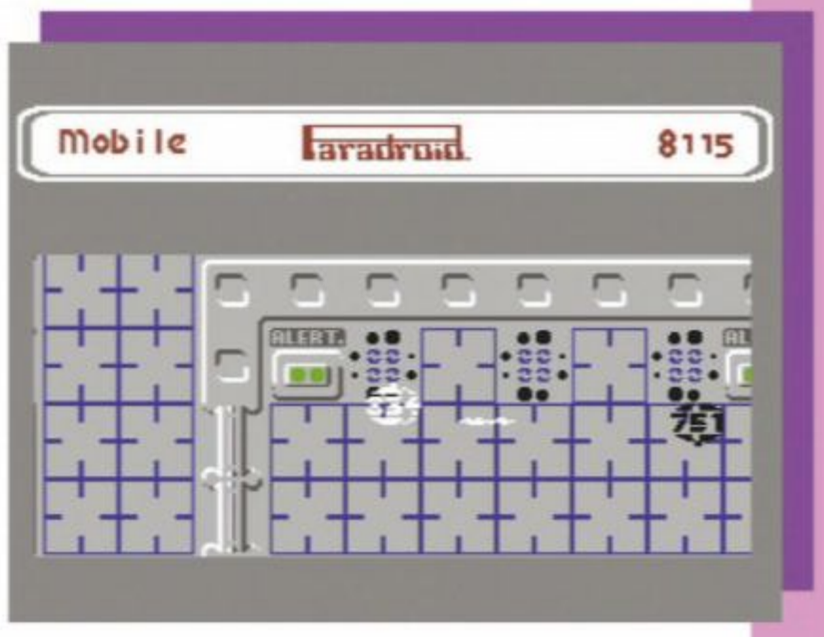
▶ evolution from Survive. "The transfer game just sort of happened," Andrew admits modestly. "I didn't want players to just grab any robot, nor have a random chance of achieving transfer, they had to earn it. Taking over another robot needed to be a risk, where the difference between the robots decided how many shots you and the opponent got to use in the transfer game."

Andrew built on Survive further by giving Paradroid nine classes of robots in place of the earlier game's two identical assassins. "Since the player could take over other robots, I implemented a hierarchy, with the numbering system being a simplistic way of viewing that hierarchy," Andrew notes. "I wanted players to work their way up; the idea was to use the different robots against each other. It would also get them used to the different types of robot."

As with Survive, Paradroid would be a fight to the last combatant, but this mechanic required an overhaul in order to work with Andrew's latest project. "The assassins could change from level to level in Survive, just like the players, and so they had the ability to roam throughout the game," Andrew reflects. "But the robots in Paradroid couldn't, and so the last man standing objective was implemented in Paradroid per level and for the whole ship."

But due to the limitations of the C64, another aspect of Survive didn't feature in Paradroid at all. "Paradroid was always going to be single-player, just because of the limited number of sprites available," Andrew points out. "Survive needed seven separate processes to run a six-player game, where each player had their own screen."

But the single-player Paradroid did incorporate fresh concepts that Survive had lacked, such as energisers to recharge the player's droid and an alert system to reflect their kill rate. Paradroid also dimmed the lights when decks were cleared

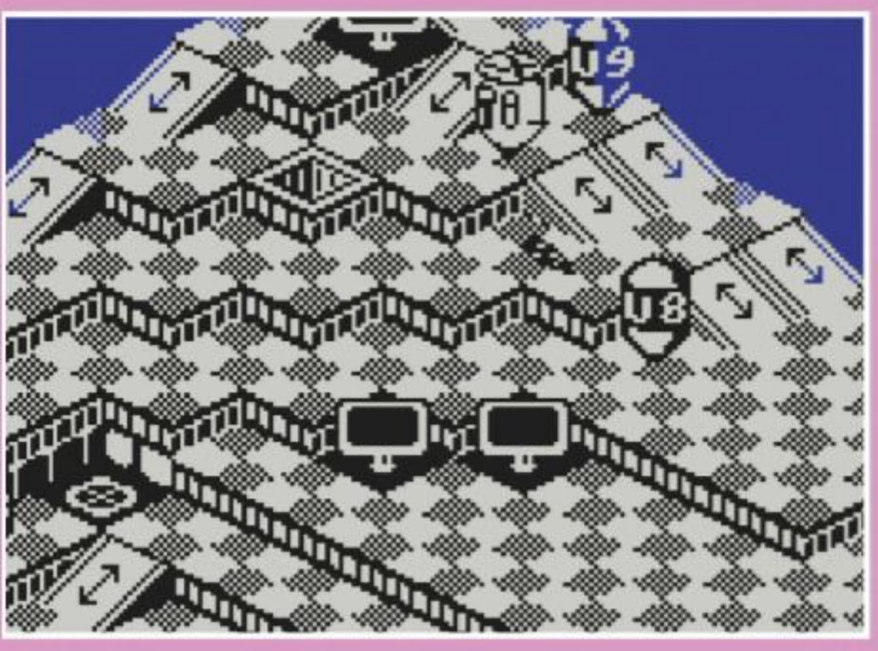


» [C64] Players of Survive had a single life, but Paradroid gives players energy and energisers to replenish it.

of droids, although this idea wasn't completely without precedence. "Survive was a shorter game, about five minutes would be enough to get a winner, so we didn't need energisers," Andrew observes. "Paradroid's alert status gave a good bonus if you could kill lots of robots quickly. It gave you an idea of how well you were doing, and was the way to maximise your points score. The blackouts came from another game I wrote, called Dalek Hunt. In that one, you had to destroy the generator and then the lights would go out, but there would still be Daleks on the way to the exit, in the dark!"

Following its release, Paradroid became a great success, but a straight conversion to the popular ZX Spectrum was deemed impossible, and so Andrew's Graftgold partner Steve Turner opted to create an isometric version for the system called Quazatron. "I thought I could make use of a 3D scenario by having some weapons use gravity," Steve

» [C64] When the lights dim in Paradroid it indicates that you have dispatched every droid on a deck.



» [ZX Spectrum] Once suitably upgraded, Quazatron's KLP-2 can ram opponents off the edges of the game's playfields.

» [ZX Spectrum] The range weapons in Quazatron are more visually distinctive than the firearms found in Paradroid.

» [Atari ST] Rather than just hiding enemies like Paradroid, *Ranarama* hides the rooms that you haven't explored.

says of adapting Paradroid for three dimensions. "Paradroid was top-down, so lasers would fire straight, but if someone was on a slope beneath you in Quazatron I thought it would be fun to have things that you lobbed down the slopes!"

A further opportunity to leverage Quazatron's isometric playfields followed when Steve implemented Paradroid's robot-ramming mechanics. "I put Paradroid's collision routines in, so that the big droids could smash through the little droids, and one just went off the edge by accident," Steve remembers. "I thought that was really good, and because I had the Gribbly's Day Out facial animations on KLP-2 I thought when he fell off I'd make him look scared, with his little hands going up. It was a bit like a cartoon where someone hangs in the air just before he falls."

> "I put Paradroid's collision routines in, so the big droids could smash through the little droids, and one just went off the edge by accident"
>
> Steve Turner

But a more profound deviation to Paradroid's gameplay resulted when Steve took an aspect of Andrew's C64 title to another level in Quazatron. "Andrew had designed Paradroid's computer system so that you could look up all of the different droids," Steve recalls. "So I was thinking he had got all of the system there with all of the droids' parts, and that they would be quite easy to mix and match, and build your own robots out of in Quazatron."

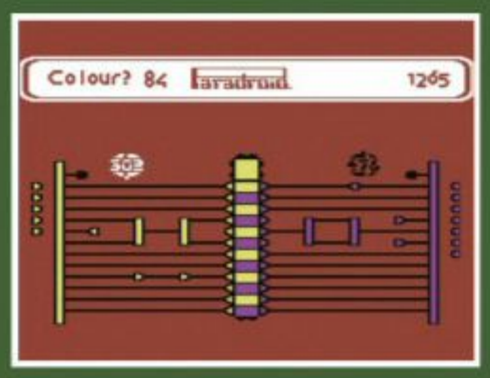
Much like Paradroid before it, Quazatron was well-received by both reviewers and players on its release, and so Steve decided to develop a Paradroid variant with a fantasy setting and hoards of disposable foes. "I put in Andrew's system from Paradroid where a bullet killed the first opponent, which took energy off the bullet, but then the bullet kept going," Steve recollects. "And I just thought it would be really nice to have lots and lots of enemies in Ranarama to really show that working, so when you got enemies lined up, and you had gotten really powerful, it was like rolling a bowling ball when you were killing several enemies in one scoop."

In keeping with Paradroid, Ranarama was given a 'last man standing' objective, but Steve limited his game's level-clearing to dispatching warlocks, and left the destruction of their minions as optional. "I was aware that because it took quite a while to get across some of the maps – perhaps more than Paradroid – that I didn't want an empty level scenario where it became boring," Steve says of finding an exit after clearing one of Ranarama's levels. " So I thought why not have all of the little foes there, so they could chase after you, and maybe even have them madder because you had killed the bosses."

» [Amstrad CPC] In contrast to Paradroid, some of Ranarama's rooms contain hoards of low-level foes.

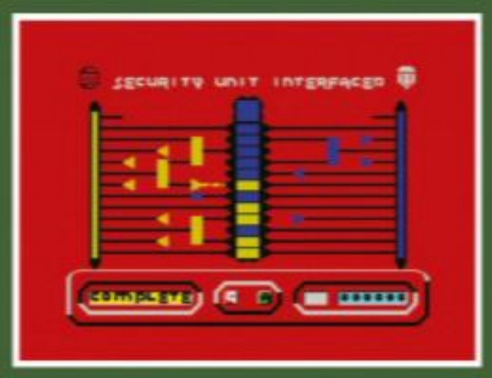
STAGES OF EVOLUTION: One-on-one battles

How rewiring circuits inspired magic word puzzles and disarming bombs



PARADROID

■ The upgrade system at the heart of *Paradroid* is perhaps its greatest evolution from Andrew's earlier game *Survive*. It's based around a sub-game triggered by ramming droids, where players attempt to rewire more circuits to their colour than an opponent in order to take them over.



QUAZATRON

■ Although its sub-games are identical to *Paradroid*'s, Steve Turner's Spectrum adaptation has a different reward system. It allows you to salvage parts from droids, rather than taking control of all of their assets as in *Paradroid*, with greater victories guaranteeing more undamaged parts.

RANARAMA

■ The one-on-one sub-game battles in *Ranarama* are timed challenges, like those in *Paradroid*, but *Ranarama* tasks you with rearranging the game's title. Like *Quazatron*, there's a choice of upgrades, which you collect after beating foes and then activate, or not, once you find a Glyph Of Sorcery.

MAGNETRON

■ Despite having sliding-square puzzles rather than circuit rewiring, *Magnetron*'s sub-games can reward players with control over their opponent, like *Paradroid*. The twist is you have the option of only completing the bottom third of the puzzles in order to destroy your foe rather than take them over.

When it hit shop shelves, Ranarama went down well with critics and gamers alike, but rather than produce a sequel Steve instead decided to follow-up Quazatron. Although the tile-swapping sub-games in Magnetron, KLP-2's second adventure, did owe a lot to Ranarama's anagram-based ones. "I'd used anagrams in Ranarama, where you swapped letters around, and I always loved those little plastic things were you made a picture!" Steve enthuses. "So it was really Ranarama's sub-game done in 2D instead of a single dimension. You moved the anagram around in Ranarama, and in Magnetron it was doing that either across or up and down."

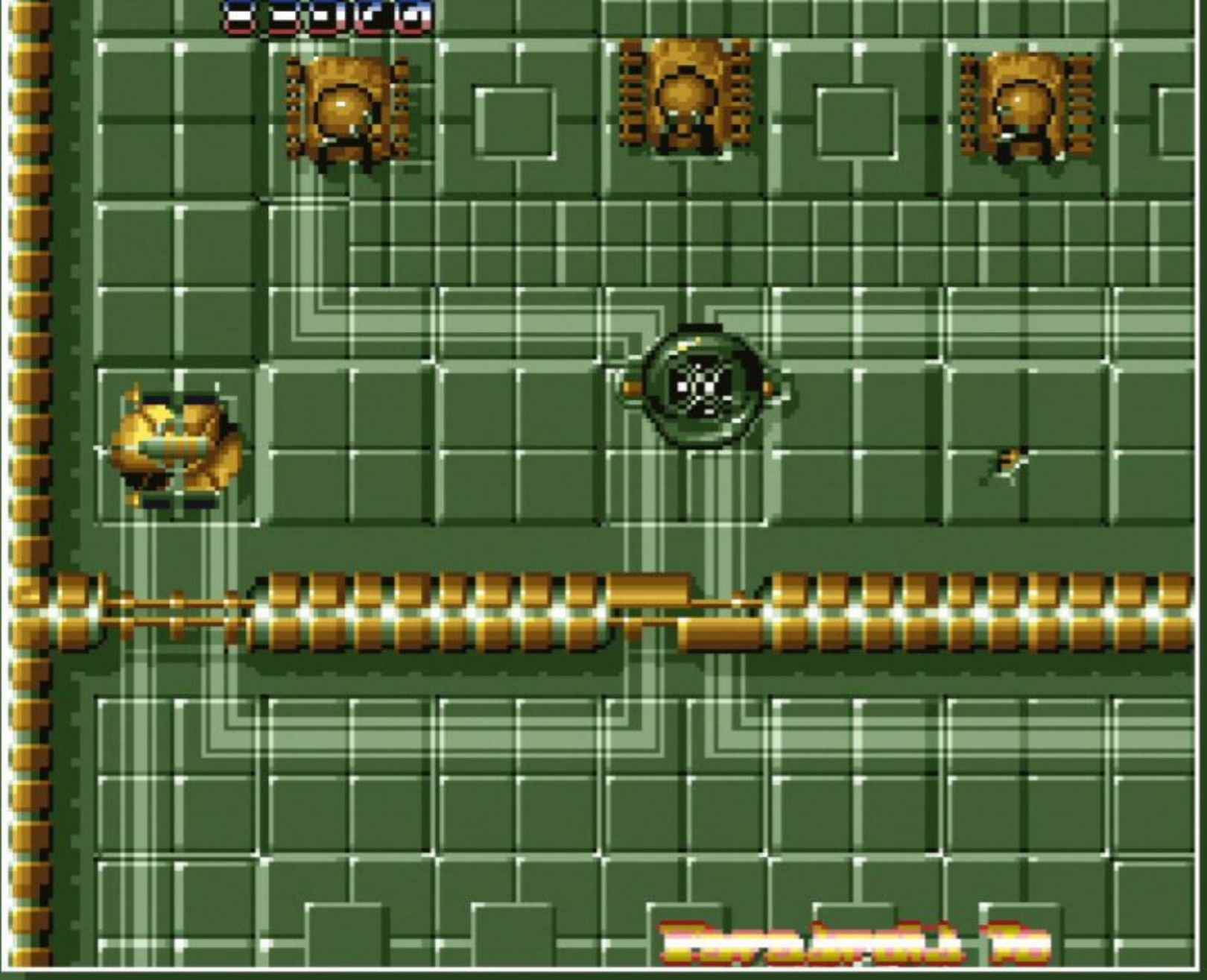
The reward for winning Magnetron's sub-games was control over the droid you'd defeated – with the twist being that KLP-2 waited behind as a 'save point' after transferring to another droid. "Paradroid's Influence Device was like a collar that fitted on a droid, and when that 'collar' was transferred to another droid it was like a control device," Steve explains. "But because I had KLP-2 as a complete droid, and you were controlling other droids in Magnetron, I thought you should go back to him. Otherwise, I would have had to resurrect him after a hijacked droid blew up."

Magnetron's gameplay also took influence from its isometric playfields – much like Quazatron had, with one of its notable innovations being the need to carry heavy magnetically charged rods over magnetic surfaces and up ramps. "I wanted to make it more useful getting a big engine than it was before, so it was giving a purpose to building your droids out of bits," Steve reasons. "I was thinking that perhaps there could be different levels of slopes and some places you couldn't get to. But then I thought about making KLP-2 carry something heavy. I also thought if I made the rods charged I could have positives and negatives around, but in the end I toned that down."

» [C64] *Magnetron* builds on *Quazatron* with magnetic surfaces that affect your position and drain your energy.

Following a court case between Graftgold's former and current publishers concerning Magnetron and Andrew's latest work Morpheus, Magnetron came out to positive if not glowing reviews, by which point a 16-bit adaptation of Paradroid had become financially attractive. "I had a larger screen area, so I figured we could have larger rooms too," Andrew says of his Atari ST and Amiga title Paradroid 90. "The second Paradroid 90 ship was a copy of the C64 one, I had a smaller introductory ship before it, and it was logical to make the ships bigger as the game progressed. That, in turn, allowed me to put more robots on the decks. But I couldn't go too mad, as the game was still one against many and it would have been easy to get overwhelmed."

» [C64] Andrew Braybrook's titles often had sub-games in them and the theme carried over in Steve Turner's Magnetron.



» [Amiga] *Paradroid 90* differentiates itself from its inspiration with the introduction of much larger rooms.

THE EVOLUTION OF: PARADROID

» [Atari ST] Each of *Paradroid 90*'s ships have a different layout, unlike the identical ships found in *Paradroid*.

> **"I was thinking that perhaps there could be different levels of slopes and some places you couldn't get to"**
>
> Steve Turner

As well as making Paradroid 90 bigger than its 8-bit predecessor, Andrew also tasked Graftgold's artists with depicting a wider variety of ships, enemy droids and weapons for the 16-bit interpretation. "The 16-bit machines offered more colours, more 'sprites,' and particle-plotting," Andrew notes, "so I wanted to make the robots and weapons more graphic. So although we had less different robots in Paradroid 90, they had more different characteristics than the robots in the original. The four different grades of weapons in Paradroid were very last-minute; I'd have preferred more weapons and more variety. So I wanted more distinct weapons for Paradroid 90. I gave one robot the ability to leave trails of bombs. It wasn't a particularly successful weapon, but it was a very strong robot."

In terms of gameplay evolutions, Paradroid 90 introduced a nasty but effective solution to players taking too long to clear ships of droids in the form of spacefaring pirates, who even had their own ship. "Potentially when you were searching for the last few robots there was not as much to do and nothing much to fire at," Andrew concedes. "The clock and the energy capacity were ticking down, but adding another time constraint didn't hurt. If you cleared the ships quickly then you never saw the pirates. If you did, you realised that you couldn't transfer to them. If you got through all of the other ships with the transfer game on, and you found the Graftgold Key on every ship, then you got the bonus ship. It had a lot of pirates from the start, and mean robots!"

Despite being limited to vertical scrolling, Paradroid 90 was a great success, and Graftgold subsequently worked on a PC Engine version, which sadly wasn't completed. "We were most of the way through developing a two-player PC Engine version of Paradroid 90," Andrew remembers. "We used the Amiga graphics for the core game, but we changed the transfer game layout a bit. We had to keep the two players together, so the screen would stop scrolling if they reached opposite sides of the screen. But we hadn't crossed the bridge of how to handle two players having to take the same lift."

Sadly, Graftgold's abandoned PC Engine project was its last attempt to build on Paradroid, as Andrew notes when reviewing his game's legacy. "It had good mileage," Andrew reflects. "Steve worked hard on the isometric presentations on the Spectrum, and their 3D look was excellent. But unfortunately the 16-bit era was all too short-lived, as the console tsunami subsequently arrived."

When asked for his final words on Paradroid and its successors, Steve explains that Graftgold could have continued to rework Andrew's classic – if only publishers had been willing. "We were talking about joining Uridium and Paradroid together, where you would land on Uridium ships and then have Paradroid within them," Steve reveals. "And we were toying around with a version for the PlayStation, a top-down title with parallaxed walls. But it was a question of getting publishers interested, and by and large they didn't want to know."

STAGES OF EVOLUTION: Character-building

How droid transfers evolved into scavenging and winning spells

PARADROID

■ You don't exactly build characters in *Paradroid*, it's more a case of transferring from one droid to another – where the higher numerical classes are more capable. If you overload a droid's circuits, however, they explode, and you have to find a new one. There are nine classes of droids, with one to three types per class.

QUAZATRON

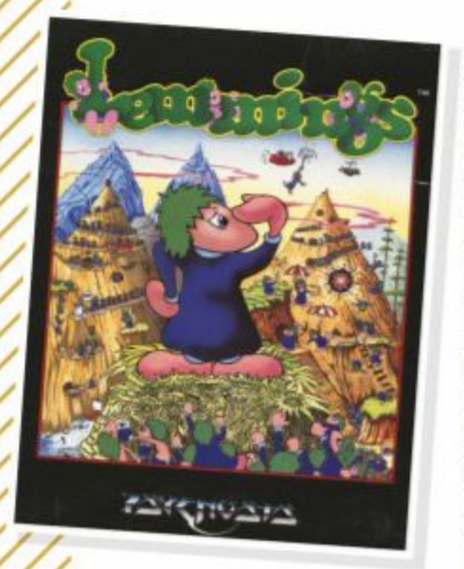
■ There's a lot more to *Quazatron*'s character development than *Paradroid*'s thanks to the successor's scavenging mechanic. This lets you gain power-ups and individually upgrade your speed, power, weapons and armour, although better weapons drain more power and tougher armour is heavier.

RANARAMA

■ Like *Quazatron*, *Ranarama* lets you upgrade a set of individual abilities, but it moves this mechanic on by allowing you to collect as many upgrades as you like. The idea is that you keep one upgrade in each category active and leave the rest in reserve, so if you deplete your active spells you can always activate others.

Conversion Kings

LEMMINGS



Lemmings was one of the biggest games ever for the Commodore Amiga, so how would an undergraduate university student take on this behemoth and convert it to the ZX Spectrum? Retro Gamer spoke to coder Jonathan Dye to find out

Words by Paul Davies

INFO

» AMIGA RELEASE: 1991

» ZX SPECTRUM RELEASE: 1991

» CONVERSION TEAM: JONATHAN DYE

» AVERAGE SCORE: 91%

» [ZX Spectrum] Let's hope there isn't a sudden strong wind.

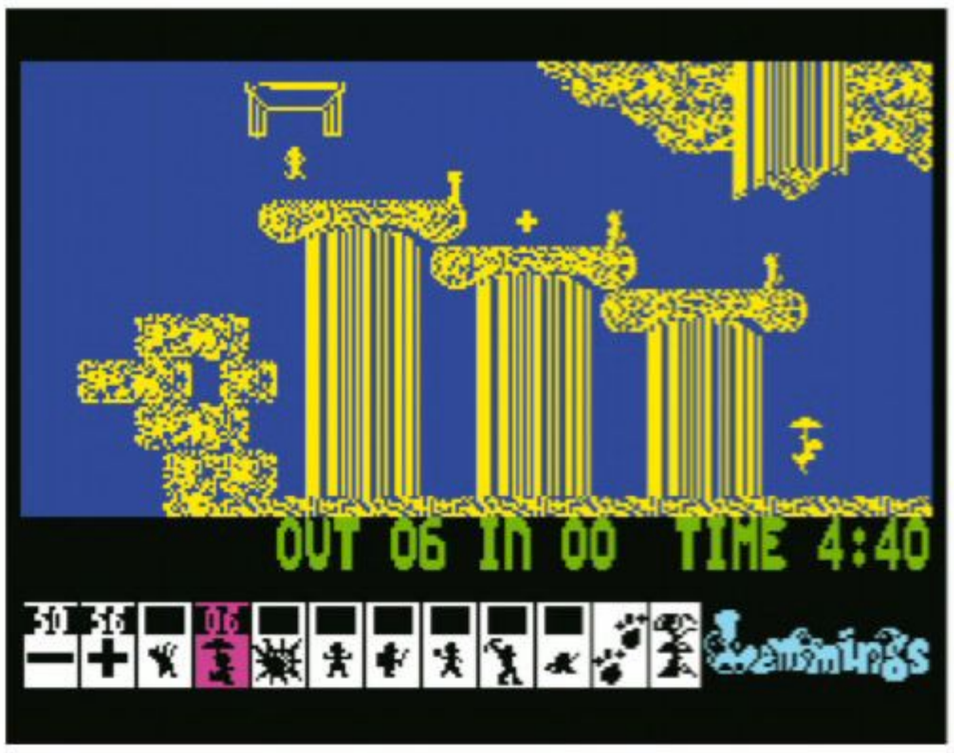
Converting an ambitious title like Lemmings to the ZX Spectrum would be a massive task for any developer. Jonathan Dye was the coder up to the task, but he had to fit his university studies around the development. Though if Jon had to blame anyone for the mountain of work, he'd have to blame himself. After all, it was Jon that took the idea to the head of DMA at the time (Dave Jones) and attempted to convince him it could work. Jon begins, "I started working for DMA in the summer of 1990 which was at the end of my first year at university. I had proposed to Dave that we did a conversion of Lemmings to the Spectrum. It's fair to say he was very sceptical based on the fact that the Spectrum was 8-bit and may not have the processing power or memory, plus the limitations around colour and sound. He asked me to develop a working model to prove that it was feasible before he would sign-off on a full-blown conversion."

So, what are the first steps in getting a working model for a game conversion? This is usually where a coder would look to transfer code and graphics from the original game, but unfortunately for Jon this was not possible with Lemmings; due to the difference in both specs and screen size, the game had to be rebuilt from the ground up. As Jon explains, "The Spectrum screen is set differently to the Amiga, which means a smaller game space, and that meant that the original levels would need to be junked and a whole new set of levels needed to be designed from scratch." He continues, "The main challenge was that it wasn't really a conversion as such, but a complete rewrite of the original game; it was more an exercise in reverse-engineering the original game onto the ZX Spectrum based on its general look and feel. A lot of things had to be rewritten to be faster or done in a different way to the way the coding was approached in the originals."

» [ZX Spectrum] It may be monochromatic but it's still obviously Lemmings.

After a long time spent redesigning the levels, next Jon had to get the critters onto the screen, but how do you make a 16-bit game run smoothly on an 8-bit counterpart? "In order to make the game as smooth as possible, there is a second copy of the screen held in the memory where the Lemmings are added in the various stages of their animations according to the role they play (digger, climber, etc)," Jon remembers. "After testing, it became apparent that from about 30-plus Lemmings on the screen, the game slowed down to the point where it wasn't very playable. That amount was a lot less than the original, but enough to work with to keep it a viable conversion."

Jon's hard work on the game paid off and eventually saw his efforts produce the goods. As Jon recalls, "I still remember the first time I saw Lemmings march across the screen on a landscape on the Spectrum and I think once Dave saw that, he knew that the game was viable. To be honest I think he and the producers were quite surprised at how smooth and fast it was. It had taken a lot of attempts to try different options to get it to be that fast. This meant it was going to be possible to see Lemmings on the Spectrum, the next thing to look at would be how to make it work on the Spectrum given its limitations."



Lemmings was certainly very appealing on the Amiga – multicoloured, nicely animated, speech and the very familiar theme music for each level. This would take some replicating and in some areas, inevitably, omissions would have to made. How would this be approached? Jon says, "It was clear from the beginning that the levels would need to be in monochrome as the limitations on colour meant that it would not be possible to do otherwise. That meant the Lemmings would effectively be in silhouette only because they are drawn so finely, even when so small, that it's clear what they are doing. With regards to sound: at first I thought of just simply having none as it's a distraction and takes up some processing power. However, the rubbish old songs had become iconic in the original, so I think there was some pressure to include tunes. The tunes actually turned out to be not too bad given the Spectrum's limited sound capability. Though personally, I think they were fairly annoying!"

Despite the machine's limitations, the Lemmings have the full range of activities which the original game had, though the other notable difference is the lack of mouse input, which is what the original

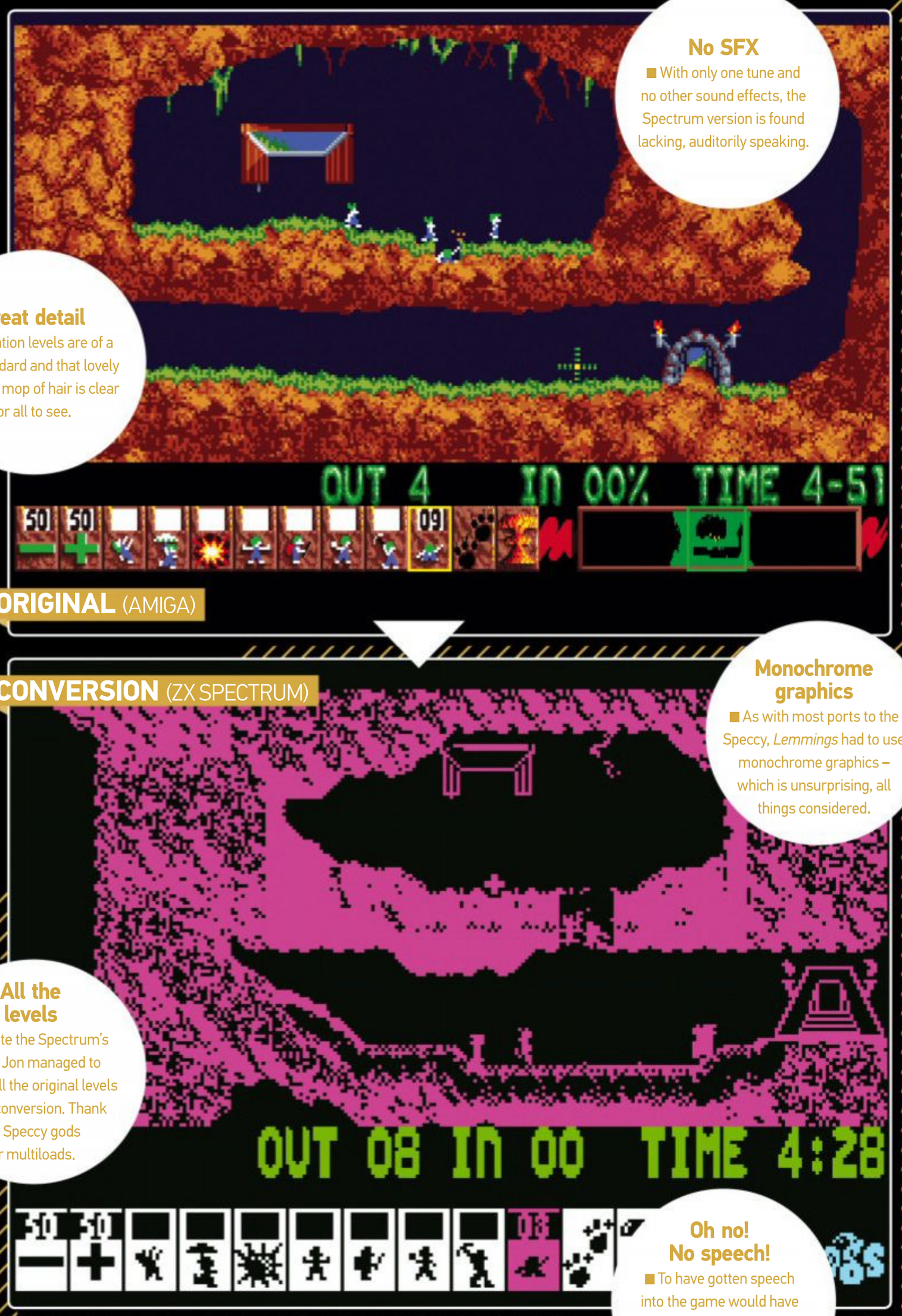
» [ZX Spectrum] Jonathan had to redesign many levels to take into account the Spectrum's smaller playing area.

» [ZX Spectrum] If this is hell it seems like a lonely place.

game was designed for. Not a lot could be done about that, given that it was not possible on the Spectrum, so the crosshairs were moved with the keyboard or joystick methods that the machine offered. Jon says of this that the movement can be a bit "clunky" when compared to playing with a mouse, but once you get the hang of it it's "not too bad" – an assessment which sounds about right to us.

Lemmings was a massive achievement for the Speccy and a real love affair for Jon. Not only was he working on such a huge project, but also trying to earn a degree simultaneously: ploughing all of his spare hours into working on the game during term time and working out of DMA studios during the holidays. The whole process took around 18 months, which shows just how big a job this was for the young coder. After all that time and effort, how does Jon feel about his conversion? "I was very happy and proud of the finished product but I was also mainly relieved. There were times during the coding that I didn't believe I was going to get it finished or that the quality simply wouldn't be good enough and it would get pulled. But I also think that the final product definitely can sit firmly alongside the other Lemmings conversions with its head held high – and it also proved to the publishers that 8-bit conversions of Lemmings were possible."

HOW ACCURATE IS IT?



No SFX
■ With only one tune and no other sound effects, the Spectrum version is found lacking, auditorily speaking.

Great detail
■ Animation levels are of a high standard and that lovely bouncing mop of hair is clear for all to see.

Monochrome graphics
■ As with most ports to the Speccy, *Lemmings* had to use monochrome graphics – which is unsurprising, all things considered.

All the levels
■ Despite the Spectrum's limits, Jon managed to include all the original levels in this conversion. Thank the Speccy gods for multiloads.

Oh no! No speech!
■ To have gotten speech into the game would have taken some doing – and extra memory. There is a catchy theme tune, though.

THE STRANGE STORY OF THE

CASIO LOOPY

The Loopy was an odd beast: a 32-bit console that was marketed exclusively to girls and housed a built-in sticker printer. Here, its creators tell the story behind Casio's abortive foray into the world of videogaming

Words by Lewis Packwood

The Nineties saw a flood of oddball consoles emerging from Japan, like the Sega Wondermega and Bandai Playdia. But perhaps the strangest was the Casio Loopy, an unlikely cross between a console and a sticker-making machine. It flopped at retail and was never released outside Japan, but in recent years it has been commanding high prices among collectors in the UK and elsewhere, who prize it for its uniqueness.

One such collector is Frazer Rhodes, whose pristine, complete Neo-Geo AES collection can be seen in the pages of Bitmap Books' Neo-Geo: A Visual History. Although his primary passion is SNK's machine, he has a soft spot for all Japanese consoles from that period – particularly the strange ones.

"I've always been a supporter of the underdog – the oddballs, the outsiders," he says. "Back in the early Nineties, things were coming out of Japan just left, right and centre, it was a really exciting time. You'd just get this stream of new consoles, new ideas – so every time you bought CVG or Mean Machines there would always be a section on the latest things from Japan. And I guess the more weird and wonderful it was, the more I was interested in it."

And the Loopy certainly was weird and wonderful, marking the result of an internal push for innovative products at Casio. Tetsuya Hayashi and Kunihiro Matsubara were working in the company's musical instruments department in the early Nineties when they were instructed by management to "come up with a product that will become a new business for Casio". Four other teams were given the same command, kickstarting projects that eventually became the QV-10 camera (the first consumer LCD digital camera) and the Tele LT-70 videophone. But Hayashi and Matsubara's team went down a very different route.

"During the early discussion period, the team was thinking about products for education," recalls Matsubara. "But since Casio's personal digital assistants for children, such as the JD-300 launched in 1992, were commercially successful, and game consoles in general were very popular all over the world, we picked a game console. To differentiate, we combined it with Casio's printing technology for label printers."

Hidekazu Tanaka was in charge of Casio's sales promotion for electronic toys at the time, and he recalls thinking that the incorporation of stickers was a good idea. "Casio had a line-up of electronic toy products," he remembers, "including electronic organisers for children, children's label printers capable of printing portrait stickers, and children's word processors. As such, the electronic toy market was booming at that time. Of course, game consoles like the Super Famicom were popular, too, and stickers are always popular with children. I thought it was interesting to combine games and stickers.

"On the other hand," he says, "I wondered: 'Are we really serious about the game business? Is it gonna work?' Casio was good at one-shot products,

but the game market is a different creature as it requires users to buy game software one after another. I was anxious about how many game titles we can create with the end outcome being a sticker."

The idea of incorporating stickers only came later on in development, recalls Matsubara. "Casio was also making LCD screens at that time, so at one stage there was an idea to make a portable game console. But instead, we wanted to create something that had not existed in the world yet, so we thought about using the technology Casio had, and the sticker printer was added to the game console."

"Casio was good at one-shot products, but the game market is a different creature as it requires users to buy game software one after another"

Hidekazu Tanaka

» The Magical Shop let you connect the Loopy console to a VCR or camcorder.

» Lupiton's Wonder Palette and PC Collection both utilised the Loopy Mouse and let users create their own illustrations.

Casio had a small amount of previous experience in the games market. In 1983, the company simultaneously launched the Z80-processor-based Casio PV-1000 and PV-2000 consoles, but they quickly sank without trace. And Casio's 1990 Super Picky Talk electronic organiser also allowed users to take care of virtual dogs, forerunning the Tamagotchi craze. But to all intents and purposes, Casio was new to the games industry – which caused headaches for the Loopy development team.

"Since the team members were developers of electronic musical instruments, we had no knowledge of graphics," says Matsubara. "So we asked Yoyogi Animation Academy [the oldest animation studio in Japan] to help us and supervise the game characters. Only the background music pieces playing in the games (you can choose from variety of music) were our own field of expertise. At the beginning, the game software was almost all made in-house. But later we needed to increase the number of game titles, so we relied on outsourcing."

Another quirk of the Casio Loopy was that it was marketed solely to girls. This wasn't the intention at the very start of development, according to Matsubara, but female employees at Casio liked the idea of making stickers, "and that unexpected usage of the game console seemed to catch the management's attention. There were already a lot of games for boys, so it was different and interesting for the management, and the path to target girls was set." Tanaka notes that Casio's 'sticker word processor' was already very popular with young girls – but it could only produce black and white stickers, whereas the Loopy could print in full colour.

When it came to the Loopy's games, the team wanted to do something a bit different. "There were lots of games for boys already," says Matsubara, "but most of them were about sports, racing, shooting, and games like Super Mario where the game ends when you clear all stages." To target the female market, the team decided to focus on more open-ended games that encouraged creativity – but they faced internal opposition regarding the move away from more conventional game genres.

> **"The team members were developers of electronic musical instruments, we had no knowledge of graphics"**
>
> Kunihiro Matsubara

"Even Casio's sales people were like, 'Every game is like that. Why do you want to change that?'" recalls Matsubara, "But we wanted to change that. Instead of the player being passive, we wanted to create a game where players can be more creative."

The resulting games were certainly different, although very simplistic. Of the five games released at launch – Anime Land, Bow-Wow Puppy Love Story, Dream Change, HARI HARI Seal Paradise and Caricature Artist – almost all were essentially tools for creating montages or drawing pictures that could be made into stickers. Bow-wow Puppy Love Story (aka Wan-Wan Aijou Monogatari) stood out as the only real 'proper' game among the launch titles, an adventure title in which the player controls a girl called Momo and her pet puppy Baku. The script for the game was written by Kenji Terada, scenario writer for the first three Final Fantasy games, and Terada even made an appearance at the Loopy's press launch event, which was held in a hotel near Casio's HQ.

The Loopy – also known as the My Seal Computer SV-100, with 'seal' being the Japanese term for sticker – launched in October 1995 at an RRP of 25,000 yen, with games costing

» The internals of the Loopy measured somewhere between the Super Famicom and the PlayStation in terms of power.

THE LOOPY LINE-UP

BOW-WOW PUPPY LOVE STORY

RELEASED: 1995

■ According to sales head Hidekazu Tanaka, this was the Loopy's bestselling game. The script was written by Kenji Terada of *Final Fantasy* fame, and the story sees a girl called Momo and her dog Baku adventuring through a land of sentient fruits and vegetables.

ANIME LAND

RELEASED: 1995

■ This simple illustration program allows you to create scenes with anime characters, food, flowers and other objects, and then print them out as stickers to place anywhere. It was bundled along with the machine at launch and developed internally within Casio.

HARI HARI SEAL PARADISE

RELEASED: 1995

■ Another piece of illustration software for the Loopy, *HARI HARI Seal Paradise* enables you to create name stickers and small pictures using a variety of backgrounds and fonts, and was, again, developed internally by the development team at Casio.

DREAM CHANGE: KOKIN-CHAN'S FASHION PARTY

RELEASED: 1995

■ The Loopy's second bestselling game according to Tanaka, *Dream Change* saw players take control of a girl who aims to be a top model. Players can dress her and print stickers of her outfits. It was developed by Alfa System.

CHAKRA-KUN'S CHARM PARADISE

RELEASED: 1997

■ Developed by Armat, this is the Loopy's final game release, and the rarest to find out in the wild today. It stars Chakra-kun, a mischievous cat from a contemporary manga by Joju Sayuri, and is based around fortune-telling.

I WANT A ROOM IN LOOPY TOWN!

RELEASED: 1996

■ Like all of the Loopy games released from 1996 onwards, *I Want A Room In Loopy Town* is compatible with the Loopy Mouse, released in the same year. The game was created with input from Kenji Terada, and sees players designing a room.

PC COLLECTION

RELEASED: 1996

■ This collection of ten applications was bundled with the Loopy Mouse but also available separately. The applications included a word processor, horoscope, music composer and, naturally, drawing software.

LUPITON'S WONDER PALETTE

RELEASED: 1996

■ Yet another illustration program, this was one of the handful of Loopy titles that wasn't developed internally by Casio, instead coming from Axes Art Amuse, the studio behind *ClockWerx* on the SNES and Saturn.

CARICATURE ARTIST

RELEASED: 1995

■ Tanaka recalls that this is the Loopy's third bestselling game, and it's yet another illustration program, this time one that lets users create caricatures and then print them out as stickers. Can you spot a theme emerging here?

LITTLE ROMANCE

RELEASED: 1996

■ This is a comic-creation program in which you can fill in the text in speech bubbles and match them with precreated characters, or design your own characters from scratch. And then, naturally, print out the resulting comic.

» Frazer's love affair with the Casio Loopy began about a decade ago when a friend bought a selection of them back from a visit to Japan.

COLLECTOR'S CORNER

Meet the collector that's obsessed with all things Loopy

Frazer Rhodes (@frazer_HX) bought his first Casio Loopy around eight years ago, when a collector he knew brought around ten new, sealed consoles back from Japan. He paid just £65 for the machine, but interest in the unique Japanese console spiked a few years later, and he ended up selling it to a museum in Italy for £375.

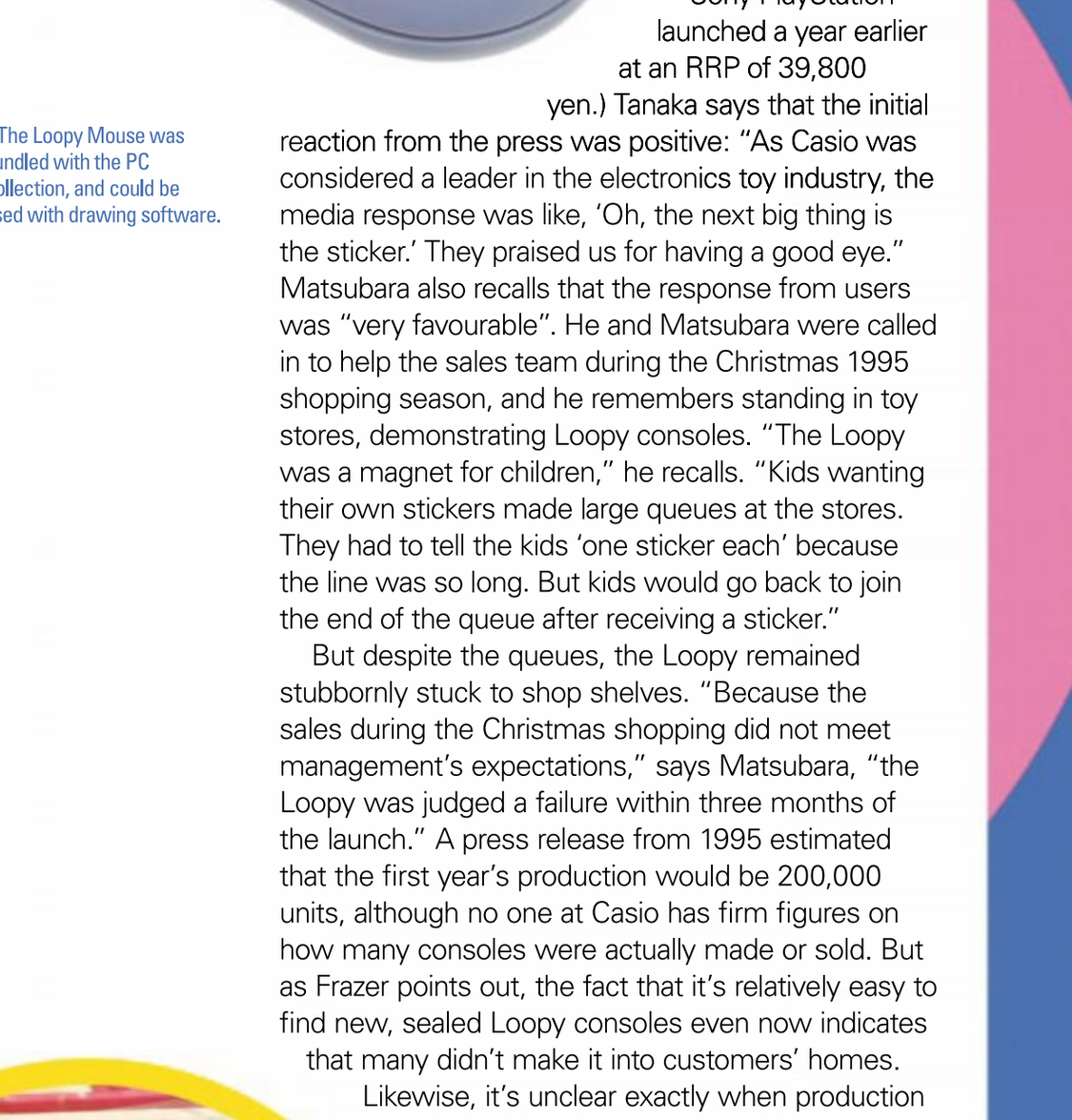
Since then, he says, prices have come down a little as people have got greater access to Japanese trading sites like Yahoo Japan. Boxed consoles occasionally come up for sale on eBay for prices between £100 and £225, but the Loopy is more common on Japanese websites.

Frazer says that he paid between £20 and £25 for most of his Loopy games on Yahoo Japan, plus shipping and fees. But he is still hunting for the Loopy's rarest game, *Chakra-kun's Charm Paradise*, which was released right at the end of the console's lifetime in 1997. "I just haven't seen that come up for sale. I suspect there's probably a few other collectors who are looking out for that game, so it could get interesting if that ever comes up."

He notes that the games tend to be "much of a muchness", an assortment of sticker-creation software and simple adventure games, but that the Magical Shop, which allows the Loopy to be connected to a VCR or camcorder, is "probably the best thing about the Loopy, from a techie perspective". The peripheral goes for £70-£95 on eBay.

However, he says, the hardest bit about collecting for the Loopy is "actually getting hold of the tape to print stickers". As a consumable item, the sticker tape is becoming ever rarer as the years go by. "If everybody prints the stickers," notes Frazer, "there'll be no more tape left." He recently managed to buy one new sticker cartridge for around £17 including postage – but that was a considerable mark-up on the tape's initial selling price: "The sticker on the box said it originally cost 98 yen!"

» Frazer's Casio Loopy collection is impressive, however he is still searching for a copy of *Chakra-kun's Charm Paradise*: the system's rarest title.



» The Loopy Mouse was bundled with the PC Collection, and could be used with drawing software.

» Fraser's sticker roll cost him a lot more than the original cost of 98 yen.

▶ 6,000 or 7,000 yen. (For comparison, the Sony PlayStation launched a year earlier at an RRP of 39,800 yen.) Tanaka says that the initial reaction from the press was positive: "As Casio was considered a leader in the electronics toy industry, the media response was like, 'Oh, the next big thing is the sticker.' They praised us for having a good eye." Matsubara also recalls that the response from users was "very favourable". He and Matsubara were called in to help the sales team during the Christmas 1995 shopping season, and he remembers standing in toy stores, demonstrating Loopy consoles. "The Loopy was a magnet for children," he recalls. "Kids wanting their own stickers made large queues at the stores. They had to tell the kids 'one sticker each' because the line was so long. But kids would go back to join the end of the queue after receiving a sticker."

But despite the queues, the Loopy remained stubbornly stuck to shop shelves. "Because the sales during the Christmas shopping did not meet management's expectations," says Matsubara, "the Loopy was judged a failure within three months of the launch." A press release from 1995 estimated that the first year's production would be 200,000 units, although no one at Casio has firm figures on how many consoles were actually made or sold. But as Frazer points out, the fact that it's relatively easy to find new, sealed Loopy consoles even now indicates that many didn't make it into customers' homes.

Likewise, it's unclear exactly when production ended, although a mouse peripheral and four more games were launched in 1996, with the final game, Chakra-kun's Charm Paradise, coming out in 1997.

And that signalled the end of Casio's ambitions in the games business. When asked whether the company had any plans to do a follow up to the Loopy, Hayashi and Matsubara burst into laughter – the machine was very much a one-off that didn't work out. That said, it has a certain cult following: Matsubara remembers that a US college student came to Japan to interview him about the Loopy around five years ago, and he gave her some of his old Loopy games.

In one sense, the failure of the Loopy is surprising given the fascination of Japan's youth with stickers. In July 1995, Atlus launched the first 'Purikura' machine (short for Purinto Kurubu, or Print

SPEC COMPARISON

Although the Loopy launched around a year after the PlayStation, the Casio engineers decided to aim more at the performance levels of the Nintendo Super Famicom, which had the highest market share in Japan at the time. The result was a 32-bit console with tech specs that fall somewhere in between the two machines

	SUPER FAMICOM	LOOPY	PLAYSTATION
CPU	16-bit custom WDC 65C816 core	32-bit RISC SH-1	32-bit RISC MIPS R3051
CPU MANUFACTURER	Ricoh	Hitachi	LSI Logic Corp
CPU SPEED	3.58MHz	16MHz	33.8MHz
RAM	128KB	512KB	2MB
GRAPHICS CHIP	PPU with 64KB SRAM	Custom Video Display Processor with 128KB VRAM	32-bit Sony GPU with 1MB VRAM
SOUND CHIP	S-SMP with 8-bit CPU and 16-bit DSP	Custom PCM sound source (the same used in Casio's electronic musical instruments at the time)	16-bit Sony SPU supporting ADPCM
CARTRIDGE/ CD SIZE	~0.25–4MB*	2MB or 4MB	660MB

*Although a handful of games had bigger cartridges.

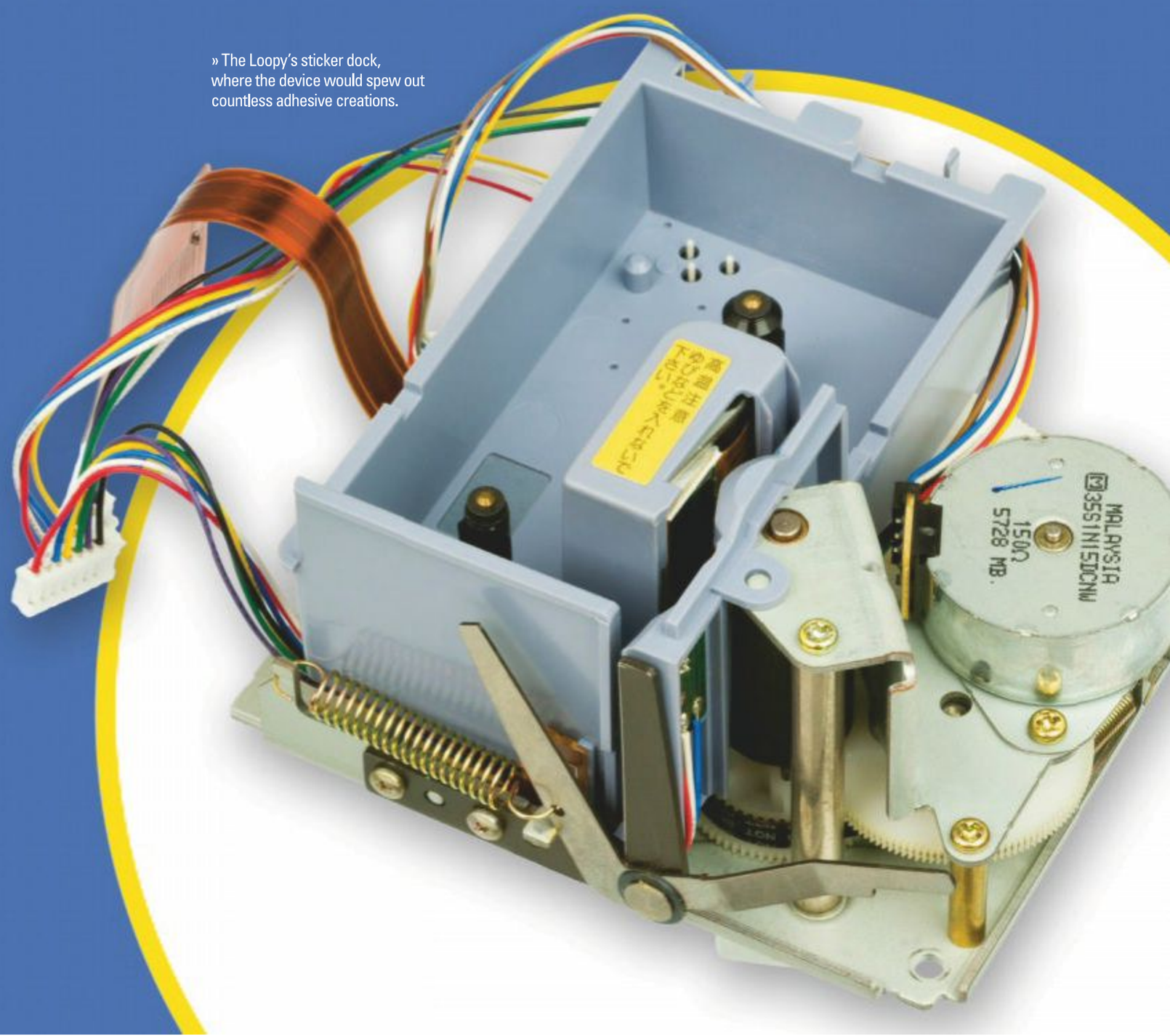
Club). Several months later, after one of the machines was featured on a TV show hosted by the popular boy band SMAP, Purikura exploded in popularity, with whole ranks of machines filling Japanese arcades.

The Loopy could technically replicate the experience of a Purikura machine at home. A peripheral called Magical Shop allowed the console to be connected to a VCR or camcorder, then users could annotate the images and print them out as stickers. But this was fiddly and expensive – Magical Shop cost 14,800 yen. Plus, whereas Purikura was a social experience, with groups of friends excitedly cramming into booths together, Loopy was very much a solo affair, owing to its single controller port. Matsubara says that were "several reasons" why the Loopy didn't have a second controller port. "Among them, player versus player games were not planned for the Loopy; it was a creation-focused game console, so we thought one controller was enough." He also notes that cost considerations were an issue.

Frazer thinks that the lack of multiplayer is one reason why the Loopy didn't take off. "They didn't design it with any ability to be sociable," he says, "which is at odds with what those sticker machines were doing in the arcades." And he notes Casio missed a trick by not including a digital camera in the console, which could've allowed users to print stickers of themselves or put their likeness into games. "Casio were producing that sort of stuff, they did make digital cameras – it wouldn't have been difficult to pair that sort of stuff up."

Ultimately, however, despite the Loopy's shortcomings, Frazer has a soft spot for the oddball console. "At that time, these companies were just prepared to go for it and try out weird and wonderful stuff," he recalls. "Nowadays it's a three-horse race with modern consoles – there just isn't that diversity and wackiness."

> **"Player versus player games were not planned for the Loopy; it was a creation-focused game console"**
>
> Kunihiro Matsubara



» The Loopy's sticker dock, where the device would spew out countless adhesive creations.

CLASSIC MOMENTS

Street Fighter III: Third Strike

» **PLATFORM:** ARCADE » **RELEASED:** 1999 » **DEVELOPER:** CAPCOM

In the great hierarchy of risk/reward systems in gaming, Street Fighter III's parry mechanic has S Tier all to itself. It's simply perfect in its execution, a flashy all-or-nothing defensive option which means that any bleak situation can be escaped or even reversed with a few perfectly timed inputs. The command itself is the real stroke of genius here – early fighting games spent years conditioning us to hold away from opponents to avoid damage, then Capcom came along with a new and improved way to defend which involved doing the exact opposite.

Few will remember their first parry, as the odd one tends to happen accidentally sometimes due to the simplicity of the input. But anyone who has put in the time to learn the system will surely recall the first time they successfully managed to string multiple parries together to intentionally deflect, say, a multihit EX special attack, or even an entire super. It's enormously satisfying each and every time you pull off a clutch multiparry, and it's this ingenious extra layer on top of the sublime core gameplay of Third Strike that makes it one of the greatest fighting games of all time.

MORE CLASSIC MOMENTS

Bring Me To Life

Third Strike's final boss, Gill, has a reputation for being a bully – a fairly common trait among his kind, as it happens. Don't celebrate too soon when you do defeat him, though. If he goes down while his super bar is full, Gill can (and will) spend it to revive himself and undo all your hard work. Best to wait for him to burn it on a super before landing the final blow.

Mystery Man

Who is Q? Is he actually a robot? And where did he get that sweet hat? None of these questions and more will be answered by Third Strike, but you can get him to turn up by playing well in arcade mode. As long as you don't drop a round, get a handful of perfects and super finishes, and keep your grades respectable, he'll show up as an eighth opponent.

Triple Threat

Every character has three different Super Arts, but you can only take one into battle with you. Depending on its power, the length of the gauge and maximum stocks will also vary – quick moves like Dudley's Corkscrew Blow charge quickly and can be used repeatedly, while heavy hitters such as Makoto's Seichusen Godanzuki have just one massive bar to fill.

Unleash The Beast

You can't really talk about classic moments in Third Strike and not bring up the moment. In what has become known as 'Evo Moment 37', Daigo 'The Beast' Umehara's legendary string of 15 parries to snatch victory from the lightning legs of defeat in a tournament final setting was (and arguably still is) utterly unprecedented in its pure hype value.

BIO

We know, it's not like Capcom to release multiple versions of a Street Fighter game. Still, this third release of SFIII hit arcades over two years after the original, bringing with it a bunch of new characters while refining the already solid gameplay to near perfection. Third Strike is one of the all-time greats in its genre, although the initial release and its follow-up, Second Impact – both available either via the Dreamcast Double Impact release or the recent 30th Anniversary Collection – really serve to highlight the game's evolution to legendary status.

KINGSOFT

Far from wanting to be a burger king, Fritz Schäfer tells Retro Gamer how he progressed from working at McDonald's to founding one of Germany's best known computer game publishers from the comfort of his family's home

Words by David Crookes

Fritz Schäfer may not be well known to many gamers outside of Germany, but in his native country he became something of a games king. From humble beginnings running a fledgling publisher from his family's home, Fritz not only grew his company, Kingsoft, into one of Europe's biggest and earliest videogame companies, he helped to establish the games industry in what was then West Germany.

His journey to the top began at the end of the Seventies when Fritz was studying electrical engineering at Rheinisch-Westfälische Technische Hochschule Aachen, a technical university in North Rhine-Westphalia. He learned to program in Fortran and later used some of the money he earned in a part-time job at McDonald's to buy a relatively inexpensive, second-hand Commodore PET 2001 from a cash-strapped seller.

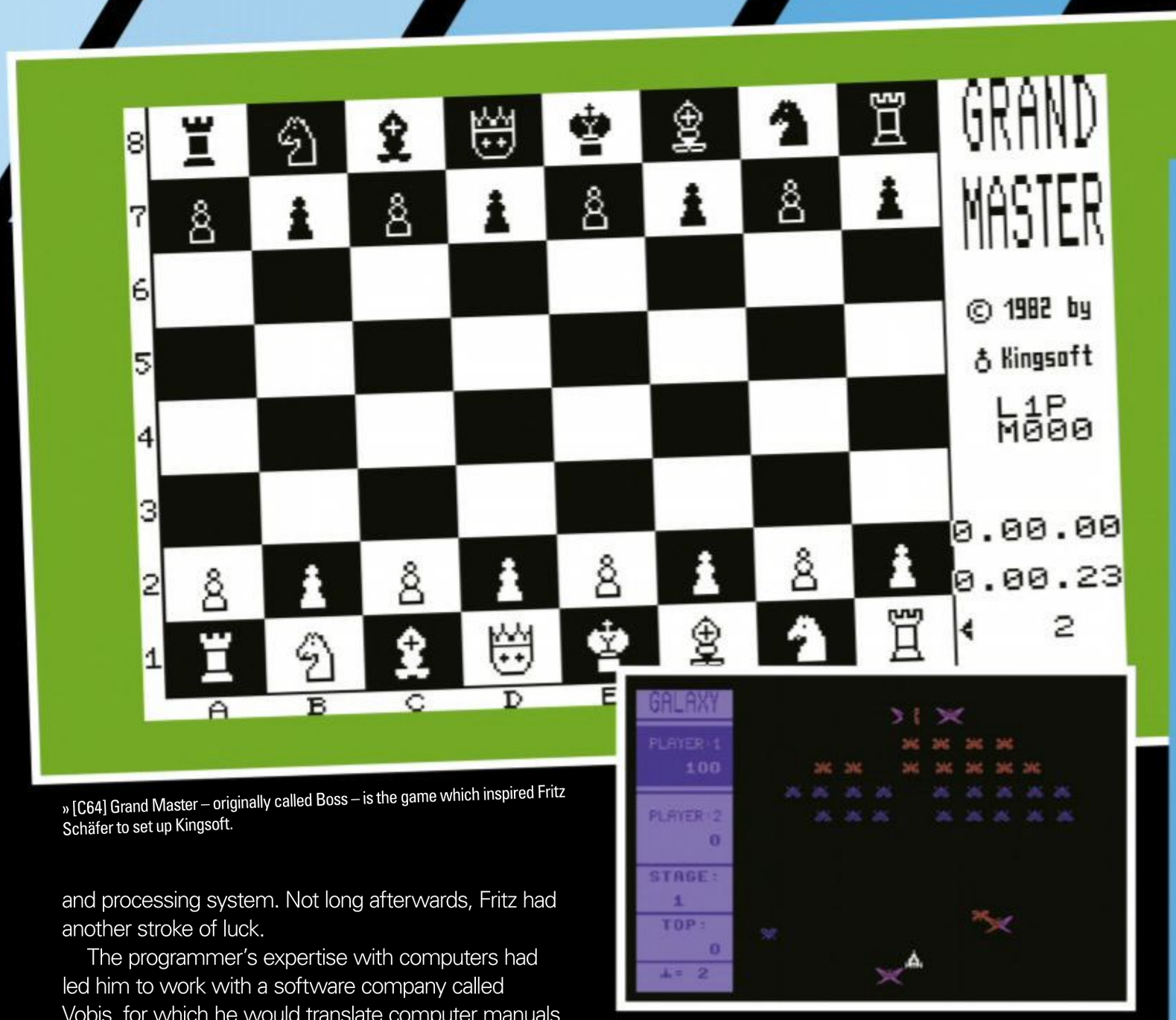
At the time, the young coder was interested in artificial intelligence. "It fascinated me," Fritz tells us, "especially when it was used in thinking and strategy games." He considered writing a chess game for the PET 2001 in BASIC, having dabbled with the language in the early months of owning the computer. "But it was not a serious option because the speed was too slow, so I studied 6502 assembler," he says. This gave him the necessary tools to create a slick chess game with a fellow PET owner.

What emerged was a title called Boss. "It represented the figures on the screen within the limited graphic potential of the computer," Fritz explains. When Commodore released the VIC-20 in 1981, however, Fritz noted it had the same MOS 6502 CPU and 5KB of static RAM as the PET but with a general-purpose colour video chip. As the VIC-20 flew off the shelves, Fritz had a brainwave. "There were no chess games for the computer at the time, and I thought there was an opportunity to offer Boss to other people." Founding Kingsoft GmbH in 1982 for the sole purpose of selling the game, he placed a small advertisement in Chip magazine offering the game as a mail-order title.

"With these first ads everything started rolling," he says. "The program was in demand and we delivered it to the customers on a cassette or a floppy disk." His mum manned the phone from their home, and a shoe cabinet was used as the basis of an ordering

» [C64] Space Pilot II was, like the original game, based on Time Pilot by Konami although the backgrounds were improved.

» The Kingsoft journey began when Fritz Schäfer bought a second-hand Commodore PET.



» [C64] Grand Master – originally called Boss – is the game which inspired Fritz Schäfer to set up Kingsoft.

» [C64] A sequel to Galaxy, Fire Galaxy is a decent enough shoot-'em-up set to the backdrop of a great tune.

and processing system. Not long afterwards, Fritz had another stroke of luck.

The programmer's expertise with computers had led him to work with a software company called Vobis, for which he would translate computer manuals and assist on the firm's stand at computer fairs. It was during one of these events that Fritz built up the courage to approach the German chess grandmaster Theo Schuster who was competing against multiple computers in a human versus machine stunt.

"On the advice of Theo Lieven [one of the Vobis bosses], I shyly asked if I could participate with my Commodore computer and Boss and I was kindly allowed to do that," Fritz tells us. "The chess master took the chess computers seriously and defeated them effortlessly but, he wanted to move very fast on my program and he forgot about his powerful attack. My program survived the threat and afterwards had much better figures on the board. Then the master gave up". Fritz certainly wasn't shy in spotting the potential marketing opportunity of this situation.

Boss ended up being released for the Commodore 16 and Commoroe Plus/4, as well as the Commodore 64. "We renamed it Grand Master when we sold it in the UK in partnership with Audiogenic," Fritz says. Kingsoft then began to grow. "Through my ads, other hobby programmers became aware of me and sent me their work which I judged subjectively, dismissing many," Fritz continues.

The next release, therefore, became Galaxy, a game by Henrik Wening which was a derivative of Galaga, an arcade title Henrik had previously cloned for the Commodore PET. Launched in 1983, it was joined by Fire Galaxy and Space Pilot in a fledgling line-up, the latter another game by Henrik but this time based on the Konami arcade title Time Pilot.

As well as Henrik, Udo Gertz also became an early star. He worked on Tom and Bongo for the Commodore computers in 1984 while Henrik created the Zaxxon-esque Zaga Mission in the same year. Udo continued his run with Ghost Town alongside Peter Hartmann in 1985 and Henrik created Space Pilot II. Meanwhile, Jörg Dierks created Karate King and Bridgehead while Alexander Graf Von Der Schulenburg caught Kingsoft's attention with the graphic adventure game Legende In Eis in 1986.

The market in general grew so fast," says Fritz. "But we had good early success. Space Pilot became a number one game in Britain and the Olympics games did very well." Indeed, they did. Winter Olympiade (or Winter Events, as it was known in the UK) and Sommer-Olympiade (Summer Events) were developed by Udo and soon became Commodore classics.

» [C64] Zaga (or Zaga Mission as it was also known) was on the same lines as Zaxxon and proved to be a decent isometric arcade shooter.

Kingsoft was unusual in that it catered heavily for the Commodore 16 market when the computer was introduced in 1985. But here it proved lucky once again. In Germany, Aldi snapped up lots of excess C16 stock and Kingsoft just happened to be a publisher with its hand in the C16 market. As C16 sales experienced a boom in Germany, sales of Kingsoft's titles soared. "The special deal with Aldi was an important moment," Fritz Schäfer tells us.

Fritz felt confident the company could expand. "We moved from my parents' home in Mulartshütte to a normal office and warehouse space in Aachen," he says. "We also developed our own distribution division which made us the exclusive distributor for important chains like Toys R Us and Vobis." It was a case of

WHERE ARE THEY NOW?

Fritz Schäfer

■ After Fritz left Kingsoft following EA's acquisition, he focused on Ikarion Software, only to depart in 1998, three years before the developer finally closed. He then left the games industry for a while, returning in 2011 when he sought to make a comeback in the flourishing apps market. Failing to make headway with EA in his bid to bring back the Kingsoft name, he created a new company called Shepps – which has worked on games such as *Busy Bags* and *Bottle Battle* for iOS, Android and Mac computers.

Marc Oberhäuser

■ Marc was Kingsoft's financial director when he left, but he later joined Ikarion Software as a project leader before being promoted to the role of managing director in 1999 until the company's closure in 2001. That year, he became a freelance game consultant and external producer, although he also took a position as senior game designer with Studio II Software from 2006 to 2009 where he worked on *Sacred* and *Sacred 2*.

Norbert Beckers

■ Norbert also moved from Kingsoft to Ikarion Software where he designed, wrote and playtested the football management game *Hattrick!* which was Ikarion's first major financial success. He also worked on *Pinball Wizard 2000*, *Project Paradise*, *Demonworld*, *Zeppelin: Giants Of The Sky* and many more, leaving only when Ikarion closed. Like Marc, Norbert worked for Studio II Software where he assisted with story and texts on *Sacred 2: Fallen Angel*.

TIMELINE

1978 ■ Having bought a Commodore PET 2001, Fritz Schäfer learns assembler code.

1981 ■ Fritz programmes the chess game *Boss* (later renamed *Grand Master*).

1982 ■ Deciding to port *Boss* to the VIC-20 and sell it, Fritz forms Kingsoft GmbH.

■ *Galaga* clone *Galaxy* becomes Kingsoft's first externally-coded game.

1983

1984 ■ Kingsoft establishes itself as a publisher of budget-priced Commodore games.

■ Commodore releases the C16, Kingsoft becomes a major publisher of games for it.

1985

1986 ■ FC Bayern Munich commercial manager Uli Hoeneß brokers deal with Aldi to sell C16s and sales boom.

1987 ■ Kingsoft moves out of Fritz's home.

■ *Emerald Mine* is among a host of Amiga titles released this year.

1988 ■ Kingsoft concentrates mainly on the Amiga market, with games including *Excalibur*, *Corpio* and *Cybernauts*.

1989 ■ Continuing a past trend for clones, *Chipy* launches as a *Tetris*-style game.

■ *Hägar The Horrible* is Kingsoft's first licensed game.

1991

■ Kingsoft stops publishing games and makes distribution a priority.

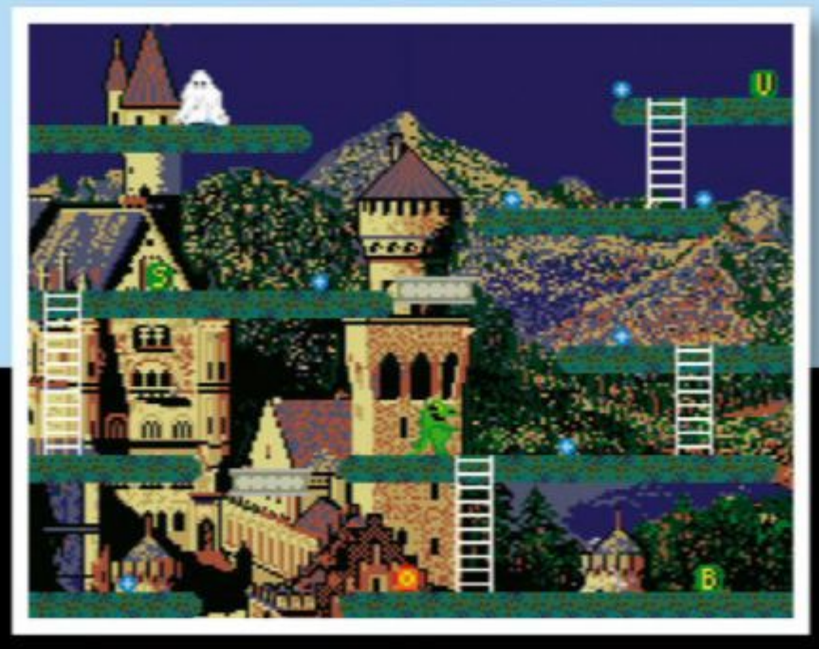
1993

■ Fritz sets up a developer of full-price games, Ikarion Software.

1994 ■ Kingsoft generates revenues of 20 million Deutschmarks.

1995 ■ Electronic Arts acquires Kingsoft for its distribution prowess.

» [Amiga] Pinball Wizard allowed for up to four-player multiplayer and even got in a cheeky advert for Mike The Magic Dragon.



» [Amiga] Not one of Kingsoft's finest releases, Mike The Magic Dragon is your typical platformer game.

▶ upwards and onwards and Kingsoft made the leap into the Amiga market.

As well as the vertically-scrolling shooter Iridon by Jens Meggers and Thomas Sikora in 1987, others titles included Fortress Underground, Soccer King, the platformer Mike: The Magic Dragon and the shooter Typhoon. Pinball Wizard was a particular sales success and Fritz also highlights Emerald Mine as a major release. Even though it was a budget title, this Boulder Dash clone had 100 levels (20 of them two-player) and is widely seen as an Amiga classic.

Fritz also had high hopes for Hägar The Horrible, Kingsoft's first licence in 1991. Based on an American comic strip by Dik Browne, the game adopted a standard platformer design. There were plans to distribute the game in the UK, too, but it never made it to these shores. "Hägar The Horrible should have been a favourite," Fritz laments. "Unfortunately there were problems with the programmer so it did not get as good as hoped."

By this time, Kingsoft had built a reputation as one of the major games publishers in Germany but it was still small. Marc Oberhäuser, who joined that year as the company's accountant manager, recalls there being just six full-time employees, two sales representatives, one contractor and about three or four part-timers.

Marc, who had wanted to work in games development since the mid-Eighties, ended up at Kingsoft just as it was considering its next move in 1991. "The Commodore gold rush was already over but development costs for games were still low in the market that Kingsoft covered," he tells us. That would start to change, however, as the move towards PC games began. The days when a game would cost between 5,000 and 20,000 Deutschmarks were close to being over, according to Marc.

Even so, wider European sales were helping matters. Emerald Mine, Space Pilot and Bongo had sold well in the UK but sales nevertheless began to falter. Locomotion in 1992 was a lovely title, for instance, and one of Fritz's favourites, yet it didn't sell in the numbers Kingsoft expected.

Part of the problem was its past. "Kingsoft was known as a budget games company: it was the German Mastertronic, if you like," Marc says. "It had an exclusive deal with Toys R Us which was huge and the shops were plastered with Kingsoft games. But with the slow death of the Commodore platforms, sales at Toys R Us declined. Toys R Us had a 100 per cent right of returns, at the end of the day, all the remaining Commodore games were shipped back."

It meant the last games developed by Kingsoft sold in limited numbers. "EON, Die Prüfung (both on C64), Balance (PC), Locomotion (Atari ST), Paramax and Missiles over Xerion (both on Amiga) – all those games were rated from okay to good but I don't think they sold more than 500 games of each title," Marc continues. "In fact, the Atari ST version of Locomotion sold just three copies, if I remember correctly – at the time the game was released, which would have been

THE DNA OF KINGSOFT

BEDROOM CODING

■ For a good few years after it was founded, Kingsoft operated out of Fritz Schäfer's own family home, moving to an office in Aachen (a town towards the German-Belgian border) in 1987 while taking up warehouse space for the distribution side of the business. Fritz wrote his chess game, *Grand Master*, from home as did many of Kingsoft's external developers.

GERMANIC GROWTH

■ Although it wasn't always plain sailing for the company – there was a financial wobble shortly after the move to Aachen due to higher rents, salaries and the costs of distribution – Fritz Schäfer nevertheless successfully steered a company that he formed almost by accident into a pioneering publisher which helped cement the games industry in Germany.

» [Amiga] The time-management puzzle game Locomotion was developed by Prestige and has players altering railway tracks to ensure trains have a smooth passage.

» [Amiga] Hägar The Horrible is a fun cartoon platformer with eight huge levels full of collectibles and enemies to dispatch with your assortment of weapons.

1993 or even 1994, the Atari ST games market was completely dead."

Kingsoft found it hard to keep up. "PC games started to become very expensive to develop and most required larger teams," Marc says. "In the Commodore days, a flop or two wasn't nice but it could be compensated whereas tens or hundreds of thousands would not be easy to write off."

Trouble is, Kingsoft wasn't as on the ball at this stage in terms of getting fresh talent on board. "On my first day I looked at a desk that had a one-metre high pile of sendings from small private game developers who had send their games demos hoping to find a publisher," recalls Norbert Beckers, who joined as development director. "Those people did not receive answers for months. My position had been vacant for almost a year and there was in fact no development or publishing. I had to restart this from almost zero."

> **"Kingsoft was known as a budget games company: it was the German Mastertronic"**
> Marc Oberhäuser

Norbert had no experience of such a role, even though he was expected to conceptualise work, project manage, beta test, carry out press work, write manuals, manage print work, do press tours, create ad materials, organise exhibitions and sales tours and manage the production of the final boxes. "I was just a young and curious gamer," he says. "But they were highly interesting times and I learned a lot in those years."

Realising gamers would not pay full prices for Kingsoft-labelled games, the company launched a publishing company called Ikarion Software catering for full-price PC and Amiga games. Kingsoft was left to solely focus on distribution.

Shortly after, Electronic Arts swooped and bought Kingsoft. "EA needed the distribution channel," Marc says. "It wasn't interested in Kingsoft's development department and it didn't sell any game compilation of Kingsoft games or use any of the established brands."

With that move, the whole of Kingsoft came to an end. A year later, in 1995, Fritz Schäfer left to concentrate on Ikarion full time. By that time, however, his impact on videogaming in Germany was confirmed. "Fritz was motivated enough to turn a one- or two-men kitchen table developer into a major software publisher and distributor for the German speaking market over a period of 1982 to 1995," says Marc. In that sense, he really was an industry king. ✱

COMMODORE COMPUTERS

■ Commodore's computers were very popular in Germany so it made perfect sense to target owners of these machines. As Marc Oberhäuser explains, Commodore platforms made developers and publishers a lot of revenue. "If you wanted the hottest games, you had to own a Commodore," he says. "For Sinclair, Schneider and Atari, there were only breadcrumbs."

CLONED GAMES

■ A lot of Kingsoft's earlier games 'borrowed' their concepts from other titles that were in the market at the time, but this strategy helped the company build a solid financial foundation. "There was an attempt in the early Nineties to focus more on unique and own-content such as *Hägar The Horrible* and *Locomotion* but they failed to be a commercial success," says Norbert Beckers.

BUDGET PRICES

■ Kingsoft took aim squarely at the budget games market and looked to sell its games at pocket-friendly prices. Kingsoft games would arrive on shelves sporting a price tag of less than half the price of other major releases from rival publishers at that time. Later, that would become a trait that the publisher felt it couldn't shake off (unlike, say, Codemasters which successfully made the transition).

Road Rash

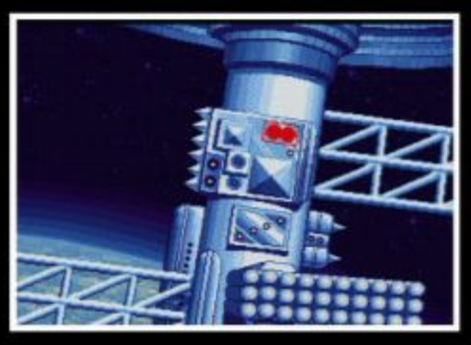
"I'M GONNA BREAK MY RUSTY CAGE AND RUN"

» 3DO » 1994 » ELECTRONIC ARTS

As a kid, my obsession with gaming spilled over into just about every other aspect of my life, including my television viewing habits. GamesMaster and Bad Influence were staple viewing in my home, and it was through those shows that I got my first glimpses of the future – all the machines that claimed they were going to sweep away the SNES and Mega Drive, as well as those that actually managed it. I was never all that enthused by the look of the Atari Jaguar's Cybermorph, so the first machine that really impressed me was the 3DO.

Because I'd grown up as a fan of my dad's Mega Drive, EA's games were of great importance to me, and of course the company was a big supporter of the 3DO. FIFA looked out of this world with its 3D stadium, but it was Road Rash that really made me want the machine. Compared to the 16-bit version I loved, it looked real – the movement of the scenery was more convincing, and the sprites looked a lot like the digitised ones I'd seen in Mortal Kombat. This console was clearly amazing, and though I wasn't aware of its exorbitant price I knew we couldn't afford it. I'd just have to hope someone we knew could.

Of course nobody did get one, and soon enough the Saturn, PlayStation and N64 meant that getting access to a 3DO didn't feel like such a pressing concern. 25 years down the line, I can count the number of 3DO owners I know on one hand, and I'm not one of them – but I'll never forget the impression that the footage of those games made on me.



» [Mega Drive] As well as sporting an impressive first-person perspective, *Zero Tolerance* also had moody art.

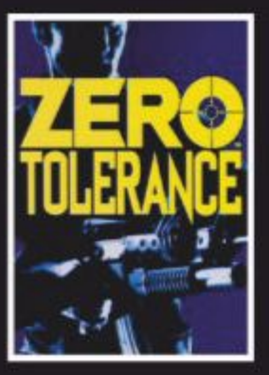
THE MAKING OF

ZERO TOLERANCE

While ambition won't make a game successful, there's no denying that **Technopop's** attempt at bringing 3D FPS gameplay to a 16-bit console deserved a bit more recognition. We take a look at how the Mega Drive was able to handle the third dimension with **Zero Tolerance**

Words by Adam Barnes

» [Mega Drive] The letterbox screen presentation gave the developer more processing capabilities.



IN THE KNOW

» **DEVELOPER:** TECHNOPOP

» **PUBLISHER:** ACCOLADE

» **RELEASED:** 1994

» **PLATFORM:** MEGA DRIVE

» **GENRE:** FIRST-PERSON SHOOTER

RANCE

The life cycle of any console always builds to a point where the hardware has become mastered and at that point the games can truly begin to impress. The Mega Drive is a curious case in this matter, since just as it begun to hit its stride it was too late: the 32-bit era was on the way. But this didn't mean that there weren't still technical achievements to be made on Sega's system, because while PC hardware was pushing gaming technology and Sony was about to launch the PlayStation, there were developers like Technopop still hoping to make the most of the popular 16-bit console.

The conception of Zero Tolerance was born from this desire to push the Mega Drive further. It was technology that first drove its design forward, with the hopes of creating a 3D engine for the console initially starting with a tech demo just to prove it could be done. "3D games always fascinated me far more than 2D games," says Thomas Gjørup, one of the developers working with Technopop and the programmer and designer on Zero Tolerance. "In particular it was the idea of being immersed in a game, a simulation of the world. But this was way before VR was within reach and even the simplest 3D real-time graphics were almost impossible for ordinary people. Heck, my favourite ZX81 game was a very crude 3D maze game, with blocky walls in black and white."

With first-person shooters only beginning their domination in the PC market, Thomas and the team at Technopop wanted to bring a similar engine over to console. "Since I had experience with and access to a Sega Genesis dev board already, Sega became the weapon of choice. So the idea of the game was to make an engine that could display a textured wall and scale and skew it to emulate a 3D perspective. Nothing more. I knew that with that capability, any game could be built on top of it. I guess my initial thoughts were 'something Wolfenstein-like', but really only as a placeholder until I'd start thinking more about it."

And while the Wolfenstein influence is clear, it wasn't just a case of making a clone of the

» [Mega Drive] Weapons and how much ammo you have for each are displayed in your HUD.

"Not all game developers care much about the business, market and the end users"

Thomas Gjørup

» [Mega Drive] Footage from the **Retro Gamer** offices on deadline day.

game on Mega Drive. There was still a desire to do something special. "Having lost so many hours to the newly released Wolfenstein," says Thomas, "I was absolutely excited about doing something similar on my own." He adds that while Wolfenstein was the "standard to be measured against", it was actually the impending release of Doom that really pushed the developers. "To be honest, when the first leaked beta versions of Doom came out I was terrified about what id Software could achieve," recalls Thomas, "and how the bar was suddenly raised. It was such a quantum leap, much bigger than Wolfenstein. It allowed – or forced – me to raise my goals a bit, though. I needed to adopt just some tricks from Doom to at least make a few things that Wolfenstein didn't. In came the diagonal walls, the distance shading, the elevators, the confined, sloped floors and the crouching. That was about how far as you could push it with that hardware."

For Thomas, it was all about making a virtual world that was "realistic and credible like Doom", improving on the core FPS concept created by id Software. "I found Wolfenstein to be a bit too simplistic, having a bit too many harsh movements. Running and turning felt like an on/off thing and it lacked the softness of acceleration and deceleration."

Of course, it wasn't a simple task to build a 3D engine on the limited hardware of the Mega Drive, which itself was built primarily to handle 2D games and didn't even benefit from cheeky 3D workarounds like the Super Nintendo's Mode 7 function. "An important reason why I started out with the technical base was really to get an early proof of concept, a verification that the goal was really viable. Embarrassingly, it took me a while to figure out the calculations for creating a simple 3D perspective. My walls kept bending and curving near the edges of the screen, and I can only thank myself for not paying enough attention in math classes. That part took me a while to figure out, but eventually I got it right – and it's not even complicated." The result was impressive, though. While it didn't match the slick movement of Doom, the 3D engine was still a huge achievement and translated that PC FPS experience over to console smoothly.

Zero Tolerance leveraged popular sci-fi as its touchstones, with Star Wars, Space Odyssey and Space: 1999 being the key titles that made up the overall look, story and focus of the game. However, the initial basis was instead a true classic set a little closer to home and acting as the foundation for the scaling, floor-by-floor style of progression that the player would battle through. "Apart from sci-fi movies, the Die Hard movie was an immense inspiration for my initial ideas of the game," Thomas continues. "The confinement of a besieged high-rise, crawling around ventilator shaft mazes and the possibility for sudden outbreaks of vivid gunfire was all I wanted for the game." Though that Die Hard influence would shift over time, it was still core to the overall action film vibe that the gameplay was built around. "Selling a game concept as hand-waving ideas centred on a technical core that can deliver any type of game is really hard," explains Thomas, "so I guess the game concept drifted off in other directions too during development, incorporating ideas from many different people. The gameplay, the level of action and the general trooper feel of the game still stayed true to my original vision, I think."

That sense of riding the lifts throughout each stage, running in and gunning down enemies was certainly one of the more memorable aspects of Zero Tolerance, at least to those that played it. There were a handful of unique aspects added into the game that helped it to separate itself from id Software's FPS games. The map and radar, for example, helped to guide the player around the maps that could otherwise have become too labyrinthine in their approach. The addition of cooperative multiplayer simply wasn't the norm with shooters, either, let alone with the ability to connect up two systems over a link cable. But

MORE MEGA 3D

Similar 3D games that pushed the Mega Drive

DUKE NUKEM 3D

■ Compared to the PC version, the Mega Drive version of Duke's first outing is downscaled, but as an FPS running rather well on Sega's console it's nothing short of impressive.

BLOOD SHOT

■ It might be a little barebones but *Blood Shot* created visually appealing maze-like environments to explore and a selection of weapons and enemies to defat.

CORPORATION

■ Also known as *Cyber-Cop* in America, *Corporation* actually used polygons for its 3D environments, which perhaps makes it one of the most technically impressive on this list.

STAR CRUISER

■ A title exclusive to Japan, *Star Cruiser* is a cross between a RPG and a fast-paced FPS. It might look basic today, but on the Mega Drive its use of 3D was quite a feat.

» [Mega Drive] As you progress, the environments change; there's a surprising amount of detail in *Zero Tolerance*'s world.

» [Mega Drive] The addition of a map on your HUD meant it was easy to navigate each stage.

especially novel was how the lives system was in fact a set of five characters each with their own distinct playstyle that, once dead, were unavailable to use for the rest of the game. "One of the first things I did for the Pro Moves Soccer game was a 'face engine' that would combine layers of face images, eyes, noses and hair to randomly create different faces," says Thomas. "This was really a necessity, as firstly there was not too much memory available to put in hundreds of different mugshots and secondly, as a small developer, you don't have the resources or time to create tons of artwork." Thomas adds that this same concept was initially carried over to Zero Tolerance, but eventually evolved beyond that. "Very early on I had randomly generated ID-cards going on in the right corner of the screen, switching person every 30 seconds just for the fun of it, complete with sunglasses and fancy hair. However, the idea of exchangeable identities survived as the concept of having a limited number of lives in the game and then tying them to specific characters and therefore to differentiate each character in skills, adding to the complexity of the game."

But even by cramming all this into a FPS engine, there were aspects about producing a first-person shooter for console that meant overcoming more than just technical challenges like the four-palette colour limit. "With the inspiration from Doom, it was clear that we had to make not just shooting, weapon change, running and turning but also strafing, crouching and jumping available. And lacking a PC keyboard with modifier keys at our disposal, we had to think about a gamepad layout that was complex enough to support the requirements, yet be intuitive enough to not put the player off," explains Thomas. "I think we had a functioning model in place quite early, but we adjusted the details as we went along and got feedback from testers."

Technopop didn't really approach the development of the game as though it was targeting a console audience, merely that it was attempting to produce a Wolfenstein-like shooter on console while maintaining the slickness that id Software was known for on PC. "[We had] a vague idea that the console player audience probably was younger, but that's about it," says Thomas. "Contrary to what people might think, not all game developers care much about the business, market and the end users.

Personally, I'm more of a nerd than a businessman. I make games that I think are cool and I truly hope that as many people as possible will share my joy and excitement in the game, but if faced with the option of making my favourite game or making something different and sell ten times as many copies, I'll always go for my favourite game."

Despite how impressive Zero Tolerance is, it never amounted to much outside of a quiet, cult following. And with Zero Tolerance releasing in 1994, the same year as the PlayStation, it was a game that at launch was archaic and unrequited; in some ways it would have been a better fit for Sony's system. The high praise from most magazines was a silver lining and a sequel was optioned, but unfortunately it wasn't enough: the sequel was cancelled halfway through its development, and a few years later Technopop was closed. There's a solemnity to Zero Tolerance, then, because there's no denying that if the talented group at Technopop could get a slick, smooth FPS like this working on Mega Drive, imagine what it could have come up with in the years that followed. Zero Tolerance may have passed many people by, but it's a testament to the ingenuity of game development and a thoroughly entertaining – if difficult – console shooter worth being remembered. ★

WOLFENSTEIN 3D

■ One modder has been working on porting *Wolfenstein 3D* over to Sega's 16-bit console. It's incredibly impressive, a true recreation of the original and very, very smooth to play.

99

LINK ADVENTURE

Zero Tolerance had a unique approach to multiplayer

An overlooked aspect of *Zero Tolerance* is its link cable support that allowed for co-op play across two Mega Drives. "As a kid I liked to build gizmos and solder stuff together," says Thomas of how the link cable support came to be. "When I realised that the individual pins in the Genesis joystick ports could be reprogrammed as either input or output lines, it was almost obvious that I should throw a cable together."

This was worked on some more until Accolade decided that it should be set as a marketable concept. "In the end we had to be a bit more serious about getting the two-player setup made robust and tested. Ultimately, I suppose the cooperative mode in *Zero Tolerance* is a gimmick – a cool one, but nevertheless mostly a gimmick. It was obvious that the gameplay – at least without a complete rework of levels, enemies and weapons – could only work as a co-op mode, not a deathmatch."

DEVELOPER HIGHLIGHTS

THE AMAZING SPIDER-MAN VS THE KINGPIN (PICTURED)
SYSTEM: MEGA DRIVE, SEGA CD
YEAR: 1991

ZERO TOLERANCE
SYSTEM: MEGA DRIVE
YEAR: 1994

BEYOND ZERO TOLERANCE
SYSTEM: MEGA DRIVE
YEAR: CANCELLED

LaserScope Fact

■ The LaserScope wasn't released in Japan, but *Laser Invasion* was. The Japanese version of the game, titled *Gun Sight*, supported the regular gun and the standard Famicom controller.

LaserScope

» **PLATFORM:** NES
» **RELEASED:** 1991
» **COST:** $39.95 (LAUNCH), $20-$60 (TODAY)

There's a grand old tradition in videogame marketing, which dictates that plastic tat can be an effective tool in boosting the appeal of mediocre games. So it was that Konami designed the LaserScope, a Zapper-compatible lightgun peripheral for the NES, with the gimmick that it was a hands-free, head-mounted device. Eagle-eyed readers will notice that it looks remarkably like a modern gaming headset, however the LaserScope contained speakers and a microphone, but it also had a light sensor and a targeting scope for your right eye. The idea was that you would use the scope to line up your shot, then give the command to fire by saying, "Fire!" (perhaps unsurprisingly).

The theory was sort of sound, and it had a futuristic gimmick appeal. The fact that it worked with all of the existing Zapper software certainly didn't hurt its chances in the market. However, this device didn't work too well in practice. The microphone's sensitivity was quite high, and basically any noise could cause it to trigger a shot. The only game specifically marketed for use with the LaserScope was Konami's own Laser Invasion, and the peripheral is now widely regarded as a bit of a dud – albeit a unique one with some collector's value. ✱

ESSENTIAL GAME LASER INVASION

The only game marketed for the LaserScope pushed the peripheral hard, offering a hefty $10 rebate on the cranial cannon. The game casts you as something of a one-man army, flying into enemy bases and messing them up. Laser Invasion covers a few different playstyles across four missions – shooting from a helicopter, straightforward infantry shooting and a maze mode. To be fair, it's certainly not the worst lightgun game out there – but neither is it a highlight on the CVs of talent such as director Nobuya Nakazato (director of Contra III and Rocket Knight Adventures) and programmer Masato Maegawa (founder of Treasure).

BLUFFER'S GUIDE TO

STEALTH GAMES

We're sneaking out with secret history of the stealth genre with intel provided by developers behind Metal Gear Solid 4, Republique, The Swindle, Styx, and Desperadoes: Dead Or Alive

Words by Paul Walker-Emig

» [MSX] A lot of the elements established in the first Metal Gear have endured throughout the series.

» [MSX] Castle Wolfenstein and its sequel, Beyond Castle Wolfenstein not only helped shape the stealth genre, but also inspired a franchise.

» The box art for Metal Gear famously ripped off promotional material of Michael Biehn in The Terminator.

From the likes of Space Invaders to Call Of Duty, so much of videogame history is about conflict. It was always inevitable that a strand would emerge in opposition to this, exploring a different kind of thrill.

"So much of videogames is shooting people in the face, stealth can be a really good alternate way of introducing tension and strife to a game," says Dan Marshall, developer of indie roguelike heist game The Swindle, on the appeal of the stealth genre. "You know that old thing of you either end a film with an explosion or a court case? The stealth genre is the court case alternative."

A number of titles have had arguments made on their behalf as the first stealth game – the likes of Pac-Man and Lupin III being a couple of examples. However, while these games require you to stay out of the way of your pursuers, they lack the sense that you're truly hiding from an enemy that can switch from a passive to active state when they spot you – something which we would argue is a fundamental component of the genre.

The first game to fit those criteria is Manbiki Shounen, or Shoplifting Boy, developed by Hiroshi Suzuki for the Commodore PET and published in 1979. In that game you must steal items, represented by dollar signs, from the shelves of a 7/11 convenience store while staying out of view of a shopkeeper who will grab you if he spots you down one of his aisles.

Credit must also go to 1981's Castle Wolfenstein and 1984 sequel Beyond Castle Wolfenstein for innovating other stealth devices that we now recognise as core mechanics of the genre. Not only did Castle Wolfenstein allow you to sneak past guards on your mission to steal secret plans, you could also don an enemy uniform to disguise yourself, fooling lower level guards. Beyond Castle Wolfenstein continued in this vein, allowing you to dupe guards with your fake papers, bribe them if you didn't have the correct pass and drag dead bodies out of the view of patrolling guards.

Other notable early attempts include Sega's 1981 arcade title 005, which featured warehouse sections where you had to stay out of the torch beam of guards by hiding behind crates, 1985 8-bit title Saboteur, which forced you to deal with or avoid security systems, and 1986's Infiltrator, which mixed helicopter flying missions with base infiltrations that use a Wolfenstein-style paper system to allow you to trick guards. We'll also mention 1986's The Great Escape as you have to avoid being seen acting out of routine by guards.

In the following year, in 1987, a game that's true significance to the stealth genre has only retrospectively been recognised was released for the MSX2 and, soon after, the NES: Metal Gear. The game features many of the elements

TIMELINE

Charting the history of sneak-'em-ups

1979 – What can be interpreted as the first stealth game, *Manbiki Shounen*, is released for the Commodore PET.

1981 – *Castle Wolfenstein* hits the Apple II, implementing a disguise system that would later be picked up by other games.

1987 – Hideo Kojima begins his association with the series that would make him famous with *Metal Gear*.

STEALTH HITS

Essential shadow sneakers you should hunt for

Metal Gear Solid

■ We could pick pretty much any game from the *MGS* series as an essential, but we've plumped for the original. This pioneering title did more than any other to popularise the stealth genre and its influence on videogames to follow cannot be understated. It's still fantastic, packed full of eccentric characters and memorable moments.

Thief II: The Metal Age

■ The *Thief* series' clever use of light, shadow and sound design, combined with intricately designed levels that encourage the player to find their own solutions to the obstacles they face, is a recipe for sublime stealth play. For many *Thief* devotees, *Thief II: The Metal Age* is the shining example of how these elements can combine to create something special.

Hitman: Blood Money

■ The ideas with which IO Interactive had been playing in the first two *Hitman* games – hiding in plain sight, using disguises, offering inventive opportunities for assassination – came together brilliantly in its fourth stab with Agent 47. The thrill of finding a clever solution to its puzzle-box-like assassination objectives and getting out unnoticed showcases the series at its best.

Mark Of The Ninja

■ As an example of how stealth can work in 2D, you can't do better than the fantastic *Mark Of The Ninja*. This is a game that proves that stealth doesn't have to be slow, putting you in control of an agile protagonist that can run rings around hostile guards – sometimes literally, thanks to a system that visualises the sounds you are making with concentric rings that let you know exactly who can hear you.

Dishonored

■ Arkane's immersive sim combines classic stealth sneaking with a variety of supernatural powers that encourage experimentation when it comes to how you complete your objectives: Blink lets you teleport across rooftops and ledges, Possession lets you take control of rats, fishes and guards, and Bend Time allows you to temporarily slow or halt the passage of time.

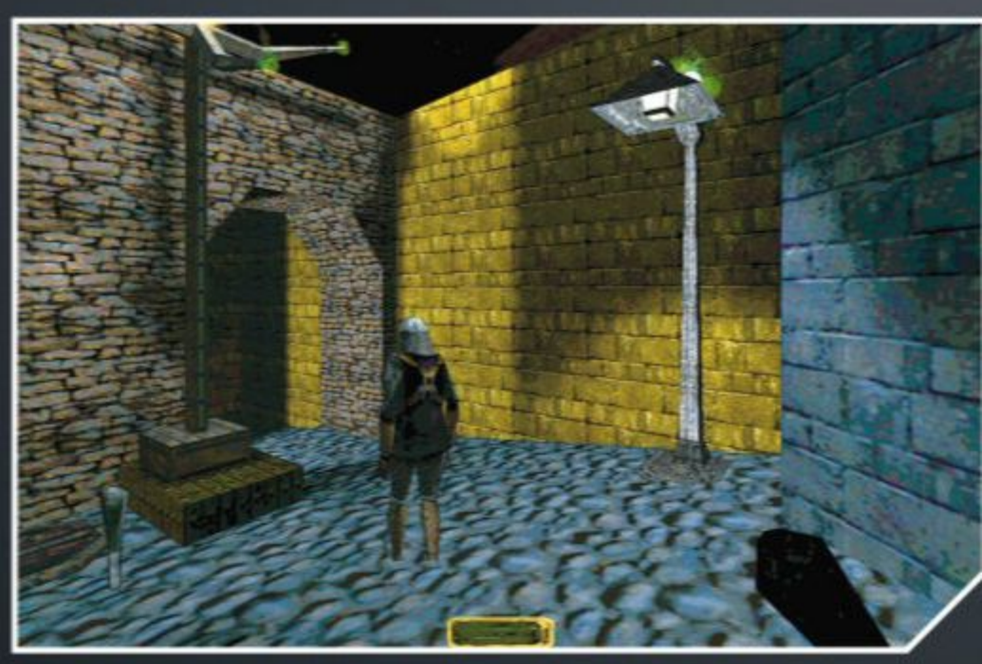
» [PlayStation] Tenchu not only featured lots of sneaking around, but also let you brutally kill your unwary foes.

▶ for which Hideo Kojima's iconic series is now famous: starting the game unarmed and having to explore to find equipment, a transceiver that allows allies to call in and give you intel, and an alert system that would see enemies search for you after you were spotted, encouraging you to hide until the alert's time expired and guard's returned to their usual patrols.

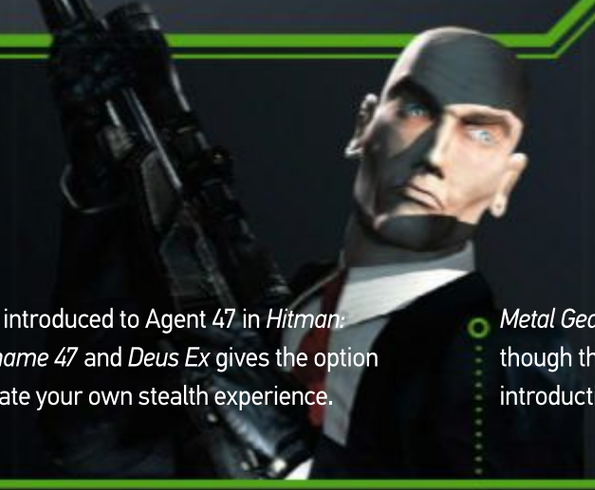
Metal Gear 2: Solid Snake built on these systems in 1990, adding the ability for enemies to hear sounds and for Snake to crawl to avoid making noise on certain surfaces, for example.

Despite these early explorations of the possibilities of stealth gameplay the genre hadn't really broken through into the mainstream and things, ironically, remained pretty quite for stealth throughout most of the Nineties. This all changed in a defining year for the genre, a year that thrust stealth into the limelight, dovetailing with the emergent dominance of 3D gaming ushered in by the PlayStation to change videogaming for ever.

"1998 was the year of stealth for me," says Metal Gear Solid 4 producer and designer of



» [PC] Thief: The Dark Project was a great shot in the arm for the genre and received several sequels, including a reboot in 2014.



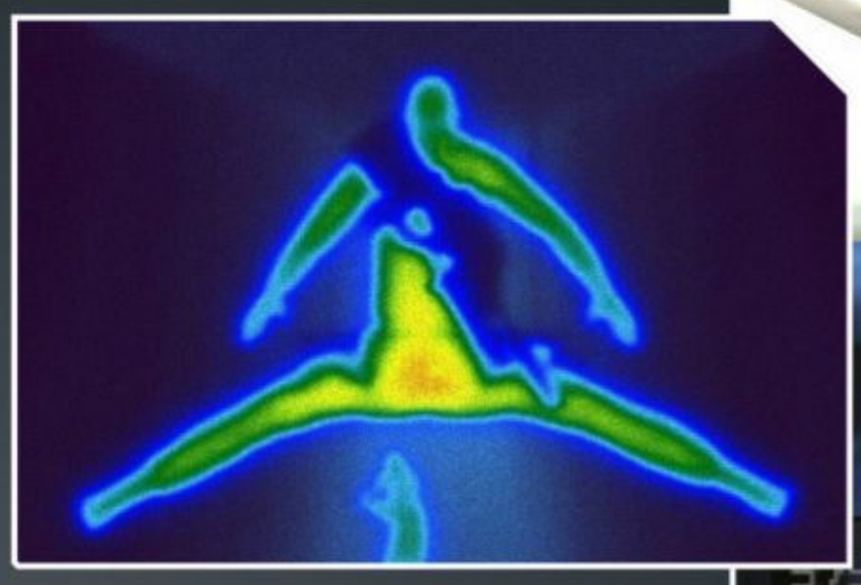
1998 — A defining year for the genre, *Tenchu*, *Metal Gear Solid*, *Thief* and *Commando: Behind Enemy Lines* were all released.

2000 — We're introduced to Agent 47 in *Hitman: Codename 47* and *Deus Ex* gives the option to create your own stealth experience.

2001 — *Metal Gear Solid 2* is released to acclaim, though the game is decisive due to the introduction of an unpopular character.

2002 — *Splinter Cell* hits the Xbox to start the Sam Fisher saga, and *Sly Cooper* attempts to bring stealth to the 3D platformer.

» [PC] Metal Gear Solid was a landmark achievement for stealth games, while also displaying impressive storytelling for the time.



» [Xbox] Unlike Metal Gear Solid, which frequently veered into action territory, Splinter Cell was a lot more stealth-focused.

Republique, Ryan Payton, on the year that changed stealth. He points out that stealth isn't the easiest of genres to get into and argues that the incredible games released in 1998 encouraged players to give the genre a chance and see what it can do. "Stealth is a fascinating genre in that it's not instantly accessible nor enjoyable, and can be rather frustrating at times," he says. "I fell in love with the stealth genre not because of its prodding mechanics, but because great games like Metal Gear Solid, Tenchu and Thief created interesting worlds built atop the mechanic."

The brutally difficult Tenchu: Stealth Assassins hit first on the PlayStation, The game is notable for the inclusion of a grappling hook that allowed your chosen ninja – you could play as Rikimaru or Ayame – to easily stalk the rooftops, dropping down to stealth kill the enemies guarding your assassination targets. "Truth be told, I didn't play Metal Gear Solid at launch because I was so engrossed in Tenchu!" Ryan reveals. "I love MGS and can say it truly changed my life, but I think Tenchu is severely underrated and would love to see a proper reboot one of these days."

Next came Metal Gear Solid, Hideo Kojima's 3D reboot of the Metal Gear series, again releasing on the PlayStation. "It's hard to undersell how important the original Metal Gear Solid was to the industry," Ryan reflects. "Its cinematic presentation was paired with deep gameplay, its sophisticated and heartfelt plot was conveyed with incredible voiceover performances afforded by the CD-ROM format and Kris Zimmerman Salter's direction, and its earnest attempt to say something meaningful was a shot across the bow for all those who said games were mere toys. That game completely changed the way I viewed games after I played it in 1998," Ryan continues, "especially with its emphasis on nonlethal playthroughs. It opened my eyes to a world where violence in games wasn't always the answer, broadening my view of what games could be."

> **"Truth be told, I didn't play Metal Gear Solid at launch because I was so engrossed in Tenchu: Stealth Assassins!"**
> Ryan Payton

» Sam Fisher is practically defined by his lime-green emitting night-vision goggles.

The critically acclaimed and commercially successful Metal Gear Solid series continued to be a flag bearer for the genre: Metal Gear Solid 2: Sons Of Liberty developed the capabilities of enemy AI, having guards work as squads to check hiding places and flank the player and Metal Gear Solid 3: Snake Eater introduced camouflage and a system that required you to treat your injuries, enhancing the sense of vulnerability that's always been a key part of stealth's appeal. "As you can see from prerelease trailers for MGS4, the team was always looking for ways to evolve the stealth genre such as allowing Snake to hide in drum barrels, having smell and the direction of the wind be a gameplay factor, and granting Snake the color-shifting 'OctoCamo' suit," says Ryan.

The final stealth giant released in 1998 was Looking Glass Studios' iconic first-person PC title, Thief: The Dark Project. A visibility meter allowed players to play with shadow as a form of concealment and sound was again an important factor to consider during missions. Perhaps the most important thing about the game, however, was that it represented an early attempt at

2004 *Metal Gear Solid 3* takes us into the past and lets us play as Big Boss on PS2 and the third *Hitman* game, *Contracts*, is released.

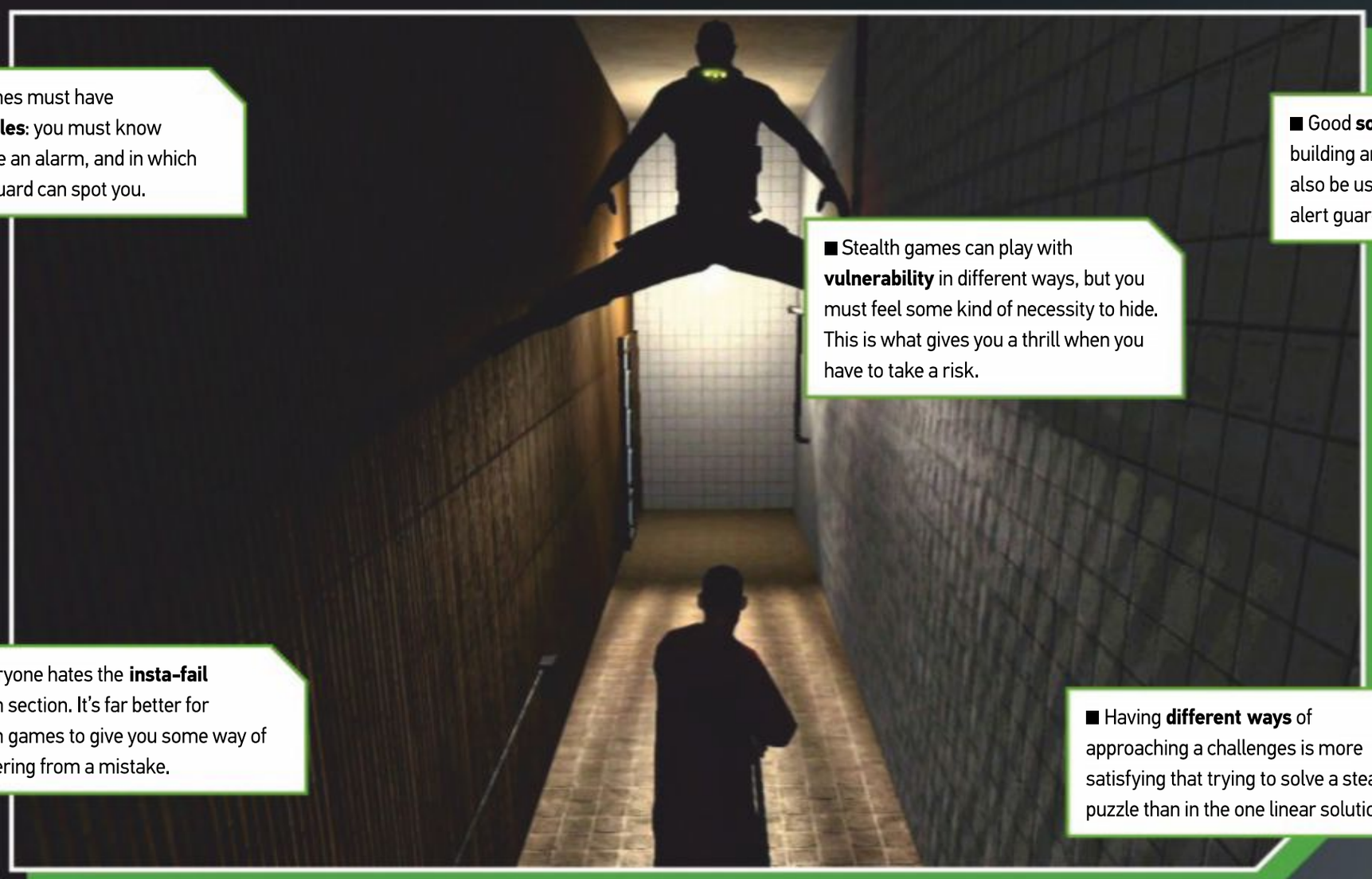
2005 *Splinter Cell*'s most fondly remembered entry, *Chaos Theory* is released for Xbox, PS2, GameCube and PC.

2006 The game that is still considered by some fans to be the best *Hitman*, *Blood Money*, is released.

2007 Ubisoft debuts its exhaustive *Assassin's Creed* series, kickstarting its biggest franchise today.

SNEAKING SUCCESS

Breaking down what makes a great stealth game



■ Stealth games must have **consistent rules**: you must know what will raise an alarm, and in which situations a guard can spot you.

■ Stealth games can play with **vulnerability** in different ways, but you must feel some kind of necessity to hide. This is what gives you a thrill when you have to take a risk.

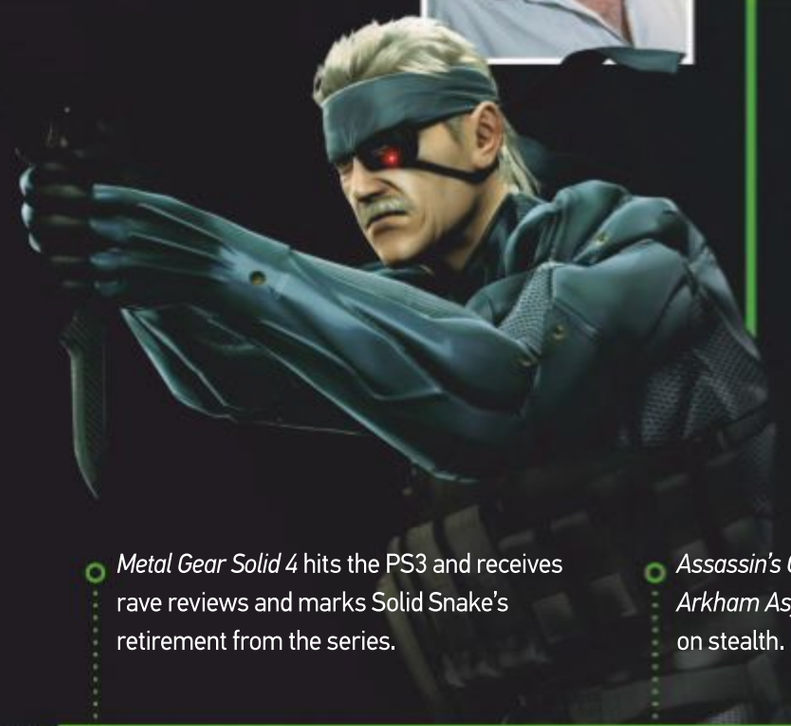
■ Good **sound design** is vital for building an atmosphere, but sound can also be used as a mechanic that can alert guards or be used to distract them.

■ Everyone hates the **insta-fail** stealth section. It's far better for stealth games to give you some way of recovering from a mistake.

■ Having **different ways** of approaching a challenges is more satisfying that trying to solve a stealth puzzle than in the one linear solution.

"I had to think how to execute a plan, but sometimes failed by wrong input, clicking at a wrong pixel"

Jean-Marc Haessig



▶ open-ended stealth, with the player given the freedom to search for different routes and approaches to achieve objectives, helping to address potential frustrations that some still feel with the genre.

"The stuff that really started to annoy me was crouching behind guards, pressing a button to do a takedown, just hoping they wouldn't turn around – not for narrative reasons, because the mission would be in jeopardy, but because I'd have to redo a bit," Dan explains on his frustration with some stealth games. "The genre feels 'designed', there's a way around these five guards on their predetermined routes around the server room, and I started to find taking them out one by one really really boring. It's clinical and perfect, and hand-designed and that feeling of "I am fighting against a designer, not these guards" really started to sap the joy out of it for me."

Dan's procedurally generated approach to level design in The Swindle allows him to move away from this 'designed' feel that he dislikes in stealth. "The Swindle's approach of giving you the tools to really go about it in any way - blasting through ceilings or teleporting through walls shrouded in steam, kind of negated the need for hard design on the rooms themselves," Dan says on the game's design. "It's not perfect- I over-relied on putting too many baddies in the rooms in later levels, so things got a bit messy – something that could have been more elegantly solved with different types of traps and what-have-you, but the focus was more that the game be a playground for your tools than as a puzzle to be solved."

While we think there is still space for what we might call 'puzzle-style stealth', certainly there are a number of games that have used this more tool-based approach to stealth pioneered by Thief to great effect. 2012's Dishonored and 2016's Dishonored 2 are directly inspired by Thief, employing a sandbox-like approach to level design that encourages you to play with the game's supernatural powers to produce a variety of intriguing and surprising solutions to stealth-based problems. This more open approach to stealth design has also influenced the Metal Gear Solid series. In a radical departure from its more linear predecessors, 2015's Metal Gear Solid V: The Phantom Pain injects the series' core system into an open world setting, allowing for emergent, systems-based stealth gameplay.

Before we move on from 1998, there is one less-touted title that deserves to be covered. Commando: Behind Enemy Lines brought stealth to the RTS genre, giving you control of a team

2008 – *Metal Gear Solid 4* hits the PS3 and receives rave reviews and marks Solid Snake's retirement from the series.

2009 – *Assassin's Creed 2* releases and *Batman: Arkham Asylum* debuts its aggressive take on stealth.

2012 – The *Thief*-inspired *Dishonored* releases, *Hitman* hits its low point with *Absolution* and *Assassin's Creed 3* is released.

2013 – *The Last of Us* debuts with a core stealth component, the last *Splinter Cell*, *Blacklist*, hits and indie title *Gunpoint* arrives.

» [PC] Desperados: Wanted Dead Or Alive mixes the world of stealth and gunslingers.

of specialists and tasking you with completing objectives, ideally, without raising any alarms. The game inspired 2001 Desperadoes: Wanted Dead Or Alive and its linage can be seen in recent titles like Klei Entertainment's Invisible, Inc.

"I played a demo on a print magazine CD of Commandos," recalls Jean-Marc Haessig, creative director on Desperados. "I loved [it] but also was sad it was set in WW2, a setting that was covered a lot at that time. I found [it] difficult to differentiate the heroes from each other as they had uniforms and the overall grey tone of the game was depressing. I suddenly thought of a setting with colourful heroes, both visually and character-wise, in sunny vivid environments, inspired by Blueberry by Jean Giraud and Italo-westerns. This sounded unique and refreshing, and a great opportunity to make an infiltration game that reflected times when I played cowboys in the woods.

"I think what frustrated me the most in Commandos was the fact I had to think how to execute a plan, but sometimes failed by wrong input, clicking at a wrong pixel. From this came the idea of implementing Quick Actions that allowed to plan executions of actions ahead and to trigger them when everything was in place," reflects Jean-Marc on how Spellbound tried to evolve Commandos' stealth gameplay. "It allowed you to combine heroic actions, and even to mimic Cooper's gunslinger quick-shots with ease. The difficult part was balance and the trap of overpowered actions. I think we didn't manage to solve all the traps. Putting a snake on top of a ladder and attracting the enemies on that roof was an exploit we haven't taken seriously enough!"

After the late-Nineties explosion in popularity, it's no surprise that a number of great stealth games followed in the Noughties, including the likes of 3D stealth platformer, Sly

Q&A RYAN PAYTON

The Metal Gear Solid 4 producer sneaks onto the page

What development challenges did you face on MGS4 and how did you try to evolve the genre?

Metal Gear Solid 4 was the first major project I was involved in end-to-end, so I didn't have much perspective on how challenging the project was compared to other games. Looking back now, however, I think it's safe to say that *MGS4* was incredibly ambitious and the team deserves a lot of credit for tackling it head-on. Development was marred by its incredibly ambitious scope but also inadequate tools, which is one reason why the group went on to develop the Fox Engine.

Another challenge during the development of *MGS4* was how lopsided the game was in terms of cinematics and gameplay. If *MGS4* had a more consistent gameplay through line, it would have allowed the team to create a deeper and more enjoyable experience.

Ironically, I believe *MGS2* suffered from similar problems, and given how *MGS4* was a direct sequel, perhaps the challenges we faced were preordained.

What was your approach to developing stealth in République?

Themes of surveillance were core to *République*, which is why we leaned heavily into what gameplay surveillance cameras could offer. Using that as a jumping off point, we got excited about how hacking combined with stealth could be our special sauce.

We often talked about the player (who hacks) and Hope (who stealths) being like great tennis partners. Looking back, however, I think we could have gone much deeper with that design. I hope one day to have another try at it.

You've worked on console, mobile and VR with MGS and République. Do theses different platforms necessarily change the approach you have to take to stealth in any way?

One of the fun and challenging aspects of game development is how important the platform can play into the design of a game. We originally designed *République* to be a mobile-first 'one touch' experience that was easy for anybody with a smartphone to play, so obviously that impacted much of the game's designs.

If I were to revisit the stealth genre, I'd very much like to do it in first-person in VR, as there is a lot of room for innovation and thrilling moments that developers have yet to explore! Presence is such a fundamental aspect of VR, and I think we're only scratching the surface. I love playing games like *Resident Evil 7* and *Firewall Zero Hour* and peeking around corners to spy my enemies. It's such a simple yet immersive movement that tells me there is a lot yet to explore in the VR medium.

2014 — *Alien: Isolation* has you hiding from a terrifying and intelligent Xenomorph. The first *Styx* game is released.

2015 — *MGSV* bring open world designs to the *Metal Gear* series and *Invisible Inc*, reinvigorates stealth strategy.

2016 — It's a great year for stealth with the *Hitman* reboot bringing the series back to its best and *Dishonored 2* releasing.

2018 — Agent 47 reaches a new high: *Hitman 2* releases as a strong follow up to the well-received 2016 *Hitman* reboot.

IN THE SHADOWS Non-stealth games with stealth sections

The Legend Of Zelda: Ocarina Of Time

■ Here you're tasked with sneaking past guards in the castle courtyard. It's not the first time the series has included stealth: *A Link To The Past* also featured a stealth section, but the game's 2D nature meant it was easier to tell if you where in an enemies line of sight than it is in *Ocarina*.

Uncharted 2: Among Thieves

■ The game forces you into stealth in the early Istanbul level. It's a bit frustrating, but as least the game does feature bespoke stealth mechanics like the ability to go into cover and take out guards, unlike *Ocarina Of Time*. The fourth game in the series further leaned into stealth, allowing you to 'tag' enemies while you're hidden.

Far Cry 3

■ *Far Cry 3* is a great example of how stealth should and shouldn't be incorporated into an action game. For the most part, it's an optional tool in your skillset that dovetails nicely with the game's other systems. However, there's also a forced insta-fail stealth section that's rightly derided, even by fans of the game.

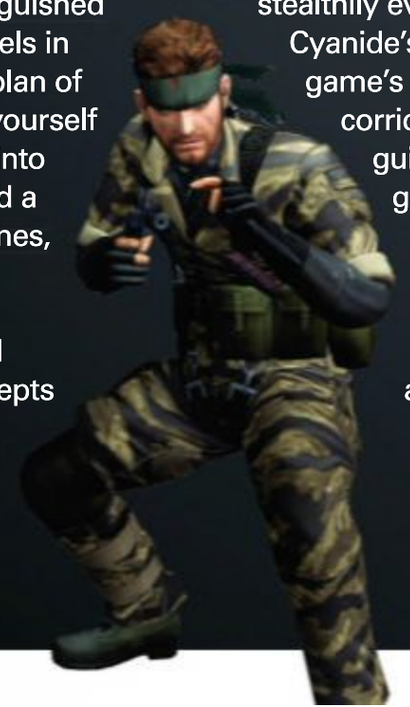
» [PC] You best stay out of sight in *Alien: Isolation*, unless you want a Xenomorph all up in your grill.

"The player might be frustrated not being able to eliminate a single isolated guard"
Guillaume Blanchard

Cooper And The Thievius Raccoonus in 2002, 2004 cult classic The Chronicles of Riddick: Escape From Butcher Bay and Rockstar's disturbing and controversial 2003 snuff-themed Manhunt. There are two important series from this period that require attention. In 2000, Io Interactive released Hitman: Codename 47, which distinguished itself by allowing you to explore levels in plain sight while you formulated a plan of attack, providing you didn't reveal yourself as hostile to enemy guards. To get into restricted areas, the game borrowed a trick from the early Wolfenstein games, allowing you to don disguises and search for creative ways to off your targets. The series has remixed and experimented with these core concepts over the course of its history, most successfully in 2006's Hitman: Blood Money and the recent reboots, Hitman and Hitman 2, released in 2016 and 2018 respectively.

2002 saw the release of another long-running stealth series in Ubisoft's MGS-inspired Tom Clancy's Splinter Cell. The game had a strong emphasis on light and dark, allowing you to shoot out lights. The game is also notable for Sam Fisher's acrobatic abilities: you can climb ledges, hang from pipes and, coolest of all, use a split jump to hold yourself up in between narrow walls. The series high-point in generally considered to be 2005's Chaos Theory, which smoothed out the rough edges of its predecessors.

There's one huge stealth series left for us to cover and that is Assassin's Creed, which kicked off in 2007 and is still going strong today with its most recent entry, 2018's Assassin's Creed Odyssey. While the series has suffered at points in its history, however, we shouldn't forget that the series hyper-mobile movement system was a thrilling revelation that gave its stealth a distinctive style, hence the high praise received by the greatly improved sequel, Assassin's Creed 2 in 2009. You can see the influence of Assassin's Creed's movement across all modern videogaming, including recent stealth titles such as 2014's Styx Master Of The Shadows and 2017 follow-up Styx: Shards Of Darkness, though that title is not the game's main influences. "The original Thief, for embodying a hero whose abilities allow him to stealthily evolve in a dangerous world," says Cyanide's Guillaume Blanchard, listing the game's inspirations, "Dishonored, for its 'open-corridor' levels in which the player is both guided towards his objective but also has great freedom in how he can approach them; Hitman, for its freedom in the ways we can tackle the objectives; Mark Of The Ninja, for the great mix between pure stealth mechanisms and a very agile character."



Call Of Duty: Modern Warfare

■ Proof that forced stealth in an action game doesn't have to be bad can be found in *Modern Warfare*'s All Ghillied Up mission. The flashback to Captain Price's attempt to assassinate arms dealer Imran Zakhaev in an abandoned Pripyat is a high point of the game and arguably its most iconic mission.

Shenmue

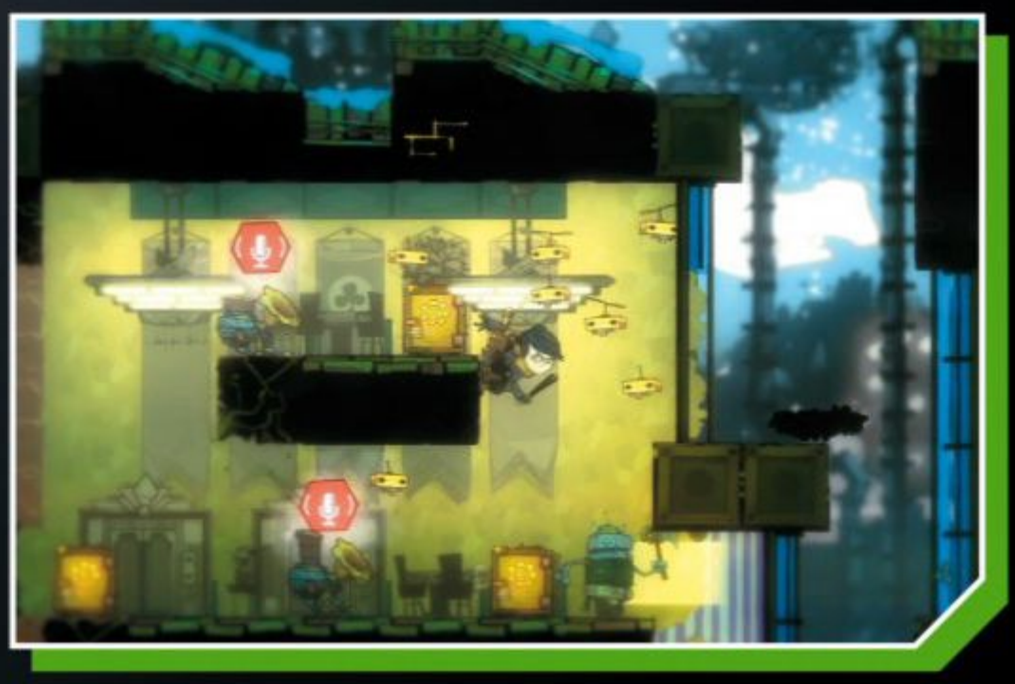
■ The intolerable section where you have to sneak past warehouse guards at the docks in *Shenmue* is one of the worst stealth sections ever implemented into a videogame. If you get spotted, you're forced back home, where Ryo falls asleep, and then you're placed back in the docks to try once again on the next day.

The Styx games provide a great example of the struggle many stealth titles have faced: what happens when the player gets spotted? "At first, we thought about prohibiting any confrontation between Styx and his enemies to make it clear that the solutions to solve situations were in the analysis of the environment and planning of actions, and not in direct combat," Guillaume explains. "However, there were some situations where the player had made a lot of effort to eliminate many guards discreetly and found themselves face-to-face with a basic guard. Should it be a game over? We thought that in this situation, the player might be frustrated not being able to eliminate a single isolated guard and so we decided to add a front-assassination feature. Our idea was to respond to the one-on-one case but without letting the player believe that fighting is a solution in the other cases. The player must first counter his opponent's attack to destabilise him and then have a window to kill him."

The success of the stealth genre has meant that its influence has leaked even into games that we wouldn't necessarily call stealth games. Think of the way RPGs like The Elder Scrolls allow you to build assassins, how BioShock contains optional abilities that can add a stealth element to its FPS combat, or the way that the Far Cry games include systems that allow you to make them into stealth experiences. Large parts of the Batman: Arkham games require combat, but there is also a strong stealth element. "The wealth of options for taking out each guard, and the ability to bat-rope up to the shadows from pretty much anywhere really solved a lot of the problems with the genre," says Dan on Arkham Asylum's stealth sections. Then there is the Deus Ex series and The Last Of Us. Technically speaking, stealth is just an option in these games, too. However, these feel like games that lean more towards stealth, whether because it fits with the worlds' atmosphere, because there are so many cool stealth options to play with or, in the case of the Deus Ex, because of a shooting system that lacks satisfaction, or, as in 2011's Deus Ex: Mankind Divided, the game features a hacking mechanic that lets you farm experience points.

» Dan Marshall, was developer of indie roguelike heist game The Swindle.

Regardless, the point is that while we are still getting stealth games – we'd highlight Gunpoint's blend of fast-paced sneaking and hacking, Mark Of The Ninja's superb 2D acrobatic gameplay, Alien: Isolation's horror-infused take on the genre, the recent Hitman games, MGSV and Dishonored 2 – the line between stealth and action games has blurred. Its appeal has been explored in a whole variety of compelling and unique ways – in 2D, in 3D, in action games and RTS games, with stealth superpowers in Dishonored, disguises in Wolfenstein and Hitman, in games like Alien: Isolation when vulnerability is the appeal and Batman: Arkham Asylum where the opposite is true, in games where you sneak carefully and slowly like Metal Gear Solid or where you fly across rooftops as in the Assassin's Creed series. These successful and diverse explorations of what stealth can be have sent ripples across the entire videogames medium.



» [PC] Released in 2015, The Swindle charges you with running heists across a steampunk version of London.

THE MAKING OF NERF Arena Blast

Not all first-person shooters have to be violent. Nerf Arena Blast demonstrated that in 1999. We take a look back at David Walls' lighthearted take on the arena shooter, and see how it's still relevant to today

Words by Jennifer Allen

A family-friendly version of Quake III: Arena hardly sounds like a feasible accomplishment and yet that's exactly what Nerf Arena Blast offered upon release in 1999. It traded rocket launchers and chain guns in exchange for Nerf Blasters, with the arenas more like a kid's soft play area than the dingy dark corridors that Quake III: Arena and Unreal Tournament favoured.

"What Mario Kart was to racing, I wanted Nerf Arena Blast to be to first-person shooters," explains David Walls, creative director at Hasbro Interactive at the time and responsible for the concept and design of the game. Back in 1999, Hasbro Interactive was keen to experiment and play around with brands that had recently become part of its domain. It was an era when Rollercoaster Tycoon, numerous games conversions of Monopoly and a reimagining of Frogger formed the basis for the firm. With fun at the forefront of the company's plans, and David's love of the Nerf brand, it made perfect sense to combine the two.

"It was around the time where bots were just starting to happen," says David. "Previously, with Doom and Quake, it was head-to-head battles... but both ID and Epic were starting to play around with bots." David saw an opportunity for younger players to get in on the action. Via bots, "a middle schooler doesn't have to go online, doesn't have to get to a LAN, and can have that feeling of playing in this sort of event", David explains.

IN THE KNOW

- **» PUBLISHER:** HASBRO INTERACTIVE
- **» DEVELOPER:** VISIONARY MEDIA, INC
- **» RELEASED:** 1999 (USA) 2000 (EUROPE)
- **» PLATFORM:** PC
- **» GENRE:** FIRST-PERSON SHOOTER

That idea led to Nerf Arena Blast. Utilising the Unreal Engine, it's remarkably similar in structure to Unreal Tournament although it was released just before Epic's hit. Its vibrant attitude makes it seem more lighthearted, however. As David says, Nerf Arena Blast was a merging of Unreal, the Nerf brand, and a "Nintendo sensibility".

"Quake and Unreal were super dark, and were appealing to a slightly older kid demographic," points out David. Nerf Arena Blast was far

» [PC] A peaceful approach was possible in both BallBlast and SpeedBlast, but far from the most fun way of doing things.

» [PC] The enemy AI in Nerf Arena Blast wasn't exactly the sharpest, but it made for a fine introduction for kids to the FPS genre.

» [PC] There were few menus to deal with. Instead, you moved between different maps via this unusually lifeless theme park of sorts.

» [PC] A key part of success was negotiating the game's many launch pads and gaining the height advantage on opponents.

removed from this idea. There was no blood or guts to be seen here because players were shooting Nerf darts at each other via some high-powered-looking weaponry. Real Nerf Blasters were used in the game, as well as a few that could only ever work within the confines of a computer game. It was the perfect opportunity for kids who couldn't afford to purchase all the Nerf Blasters they wanted to still experience the joys of shooting their mate with a foam dart.

The game included 21 maps with three different game modes so there was plenty to sink your teeth in. Each map had its own distinct thematic look, such as an Aztec-style world, or a more futuristic arena full of launch pads. There were secret areas, too, much like you'd see in id's classics. These typically offered up the best weapons in the game like the Hyperstrike, an overpowered sniper rifle-esque weapon. Gameplay was suitably frantic as you roamed these tightly designed arenas, shooting at mostly anything that moved. There was no need for camping a spot or taking your time. Success somehow felt less vital than it does now in Fortnite. It was all a little more innocent.

While the aggression of competitive play was still there, Nerf Arena Blast maintained a lighter air than most. In part due to its colourful nature and lack of gore, but also because it was far from challenging. AI bots were typically a little dimwitted and liable to run aimlessly when fired upon. It's particularly jarring by modern standards but was still pretty noticeable back then. However, it made sense given the younger age group that the game was aimed at. It was suitably good-natured like that. Enjoyment was always the priority here, rather than challenge.

"At that point, I think the game industry was growing up so much, they were forgetting about the middle school audience," David explains. "That sort of arcade-like fun… everybody sort of forgot about it until Minecraft came along and built this huge business industry on top of that audience," he notes. Understandably, he wishes the idea could have kept going. "I think we definitely had something back then," David muses.

Nerf Arena Blast didn't stand that chance. Released not long after Columbine, the attitude towards first-person shooters of any kind was understandably negative. Also, in 2001, Hasbro Interactive was sold to Infogrames and so with it went the chance for another Nerf Arena Blast. At that point, David left the firm and moved onto his own projects and development studio. He now runs Funkitron, a casual games studio specialising in mobile games for young players.

There's still an active modding community today, hanging on admirably for a nearly 20-year-old game. One of the game's then-rookie designers, Ryan Meinerding, also went on to become head of Marvel's visual development, working extensively to design the look and feel of the Marvel movies – an impressive pedigree from a title that eschewed the predictable path that other arena shooters took and made its mark in an unusually nonviolent way.

PLAY TO WIN

The game modes of Nerf Arena Blast

POINTBLAST

■ Effectively *Unreal Deathmatch: Nerf Blaster Edition*, the PointBlast mode was all about gaining points by shooting your opponent or by collecting up the bonus point tokens that were left scattered around after they were 'tagged' by a Nerf dart shooting.

SPEEDBLAST

■ This kind of plays out as a sort of race: players had to pass through seven coloured flags in sequence in order to win. Opponents could be tagged out by firing at them with a Nerf gun, obviously, sending right them back to the last flag that they touched.

BALLBLAST

■ Part-deathmatch, part-scavenger hunt, players had to shoot coloured balls through targets to earn points, while also firing at opponents to slow them down in their quest to do the same. BallBlast presented a pleasantly strategical twist on the deathmatch.

MULTIPLAYER

■ All game modes were available online, with team modes available to encourage working together. At its height, it wasn't massively popular, but it had a passionate and devout fanbase – one that endures today.

THE MAKING OF

GUN™

The Wild West has always been a perfect fit for videogames, but there was a time when the genre was bone-barren. In 2005, when the allure of the western in both cinema and games was at a low, it was Neversoft's Gun that braved this dusty frontier

Words by Robert Zak

IN THE KNOW

- **» PUBLISHER:** NEVERSOFT
- **» DEVELOPER:** ACTIVISION
- **» RELEASED:** 2005
- **» PLATFORM:** VARIOUS
- **» GENRE:** THIRD-PERSON SHOOTER

In 2003, Neversoft was in a position that every developer dreams of. Working under Activision, it had just released Tony Hawk's Underground, its fifth entry in as many years for the Tony Hawk's franchise. Tony Hawk's was a phenomenon, and Neversoft had been working almost exclusively on it since its inception in 1999.

Things were comfortable, but with that comfort came a sense of routine, and a creative craving to explore games beyond the half-pipes and crunchy roll of polyurethane wheels on concrete. As Neversoft development director Scott Pease puts it, "It was pretty clear that people needed a break from Tony Hawk's."

Thankfully for Neversoft, Activision was happy to oblige. The Tony Hawk's juggernaut would keep on rolling, but the studio was also given the chance to pitch its very own IP. "We'd earned so much money and accolades for Activision at that point that we were gifted the golden ticket to do what we wanted," Scott remembers. "We went through a period of brainstorming, but it pretty quickly came around to a western being a natural fit."

The project was based more around the personal tastes of the Neversoft team, rather than cold business calculations. Neversoft president Joel Jewett was from Montana – a mountain man with a horseshoe moustache and a love for horses and open country. "He was basically a cowboy," character artist Jon Bailey says.

Scott, meanwhile, grew up playing LucasArts' first-person shooter Outlaws, and wanted to reinvent its ideas using modern technology. This would be an ambitious open world-style videogame – albeit more The Legend Of Zelda than Grand Theft Auto – with tightly authored missions set across three midwestern US states.

» [PS2] Galloping across the plains to Gun's majestic soundtrack gave it the air of a classical Hollywood western.

But with Grand Theft Auto dominating the conversation about open world games at the time, it would've been remiss for Neversoft to ignore it. "GTA was this huge force that showed what an open world setting could do from a gameplay perspective," Scott tells us. So when it came to pitching to Activision, there was only ever going to be one way to present the game: 'GTA in the west'. Activision gave it the greenlight, and Neversoft's open world western title was born. Its placeholder title: Gun.

This was uncharted territory for Neversoft, but in its own way the studio had already been preparing for it during the making of Tony Hawk's Underground. "I look at Underground as our practice run for a bigger story that would come later," Scott tells us. "We added tech around cinematics, dialogue and story to the engine – a lot of stuff that would be absolutely critical to Gun".

Underground's levels would serve a more direct purpose as well. "Essentially, we just replaced the skateboard and skater with a horse and cowboy," Jon Bailey recalls. "I remember riding a horse around one of the urban Underground levels."

In making Tony Hawk's Underground, Neversoft was building up its muscle memory for Gun, but there was still a long way to go. Shooter mechanics, streaming levels, first-person walking controls, and myriad other elements would need to be made from scratch. The Neversoft team expanded, bringing on new motion capture, AI and mission design teams, as well as Hollywood screenwriter Randall Jahnson.

Gun was shaping up to be a true western epic, fronted by an impressive voice cast that included Thomas Jane, Ron Perlman, Brad Dourif, Lance Henriksen and Kris Kristofferson. It remains one of the few games of its era to rival the GTA series in the way of voice acting. "The beauty is that the voice cast loved the script. They were super-invested and I think it showed in the end product," Scott Pease says. "At one point, we had Brad Dourif and Lance Henriksen performing the scene right in front of us – it was awe-inspiring, one of the highlights of my career."

> "GTA was this huge force that showed what an open world setting could do"
> Scott Pease

Second shot

What would have Gun's planned sequel looked like?

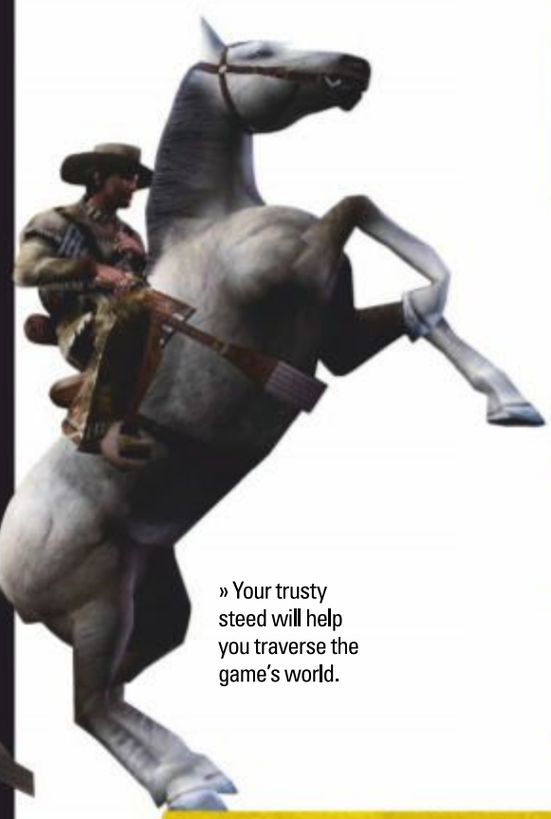
Gun's sequel was canned when Neversoft took over the Guitar Hero franchise, but it still had plenty of big ideas. It was to be a full seventh-generation open world game, and more systems-oriented than its predecessor. Neversoft was looking into a vast procedurally generated wilderness, while a morality system would dictate player interactions with the local townsfolk.

The original never delved into letting you play the outlaw (although it teased it by letting you hold townsfolk hostage), but the sequel would have changed that with procedural bank robbery missions, which the player could hit from a number of different angles. The story would probably have been completely separate to the original, with Scott Pease saying that Gun's hero Colton White "was a little polarising" and inessential for the series.

» [PS2] The map was made up of 20-plus separate zones designed around missions.

Gun is an unabashedly violent revenge tale. It follows mountain man Colton White around the American frontier as he hunts down the people responsible for a steamboat massacre where everyone, including his father, was killed. Along the way, Colton is thrown into the middle of tensions between frontier townsfolk and natives, playing peacemaker while directing everyone's

» [Xbox 360] Neversoft ended up releasing Gun as a launch title for Microsoft's new console.



» Your trusty steed will help you traverse the game's world.

DEVELOPER HIGHLIGHTS

TONY HAWK'S PRO SKATER
SYSTEM: VARIOUS
YEAR: 1999

GUN (PICTURED)
SYSTEM: VARIOUS
YEAR: 2005

GUITAR HERO III: LEGENDS OF ROCK
SYSTEM: VARIOUS
YEAR: 2007

attention to the real enemy: a former confederate general called Magruder, who is hunting for fabled treasure in the Midwestern mountains.

The violence in Gun is often gratuitous, letting you scalp wounded enemies and blow heads clean off in slow motion. But while Scott cites ultraviolent western novels like Blood Meridian as influences, Gun harnesses the romantic aspects of the western, which you feel when riding across its great plains to Christopher Lennertz's swelling orchestral score. Gun owes just as much to pre-Sixties classical westerns as it did the grittier, revisionist twist on the genre that came with later films like The Wild Bunch and Butch Cassidy.

But more mainstream inspirations show up too. "The golden cross, the mis-measuring of the treasure's location, the showdown in the mine. We stole plot devices from Raiders Of The Lost Ark!" Scott admits, with a hint of mischievous pride.

Despite spanning three states in a region renowned for its plains and vistas, the plan was always for Gun to have a compact game world; a space that made it easy to dash between side-missions such as deputising for sheriffs, capturing bounties and hunting legendary animals. But building this world wasn't just a case of making a landmass then populating it. It was more akin to an elaborate jigsaw puzzle, with different people building world segments based on the story missions that took place there.

"Imagine you have 20 missions, 20 different little areas, and then you have one designer tasked with puzzle-piecing these little bits into a whole," Scott says. "We knew there would be missions around Empire City, Dodge, the fort, but the geometry of these locations relative to each other was a mystery until later on."

You can see some of these jigsaw-piece borders if you take a closer look at the world; there's a notably large field near the centre of the map that exists just to pitch a spectacular horse battle later in the story (a mission that Scott counts among

Ahead of the game Gun rustled up a lot of open world systems that we'd see in games much later on

MINING

There's a whole lotta gold up in them thar hills, so one of the first things a two-bit sunnuva gun like you oughta do is mosey on down to Dodge town and git yerself a pickaxe. Sure, it's just $10 a nugget, but life ain't easy out on the frontier.

HUNTING

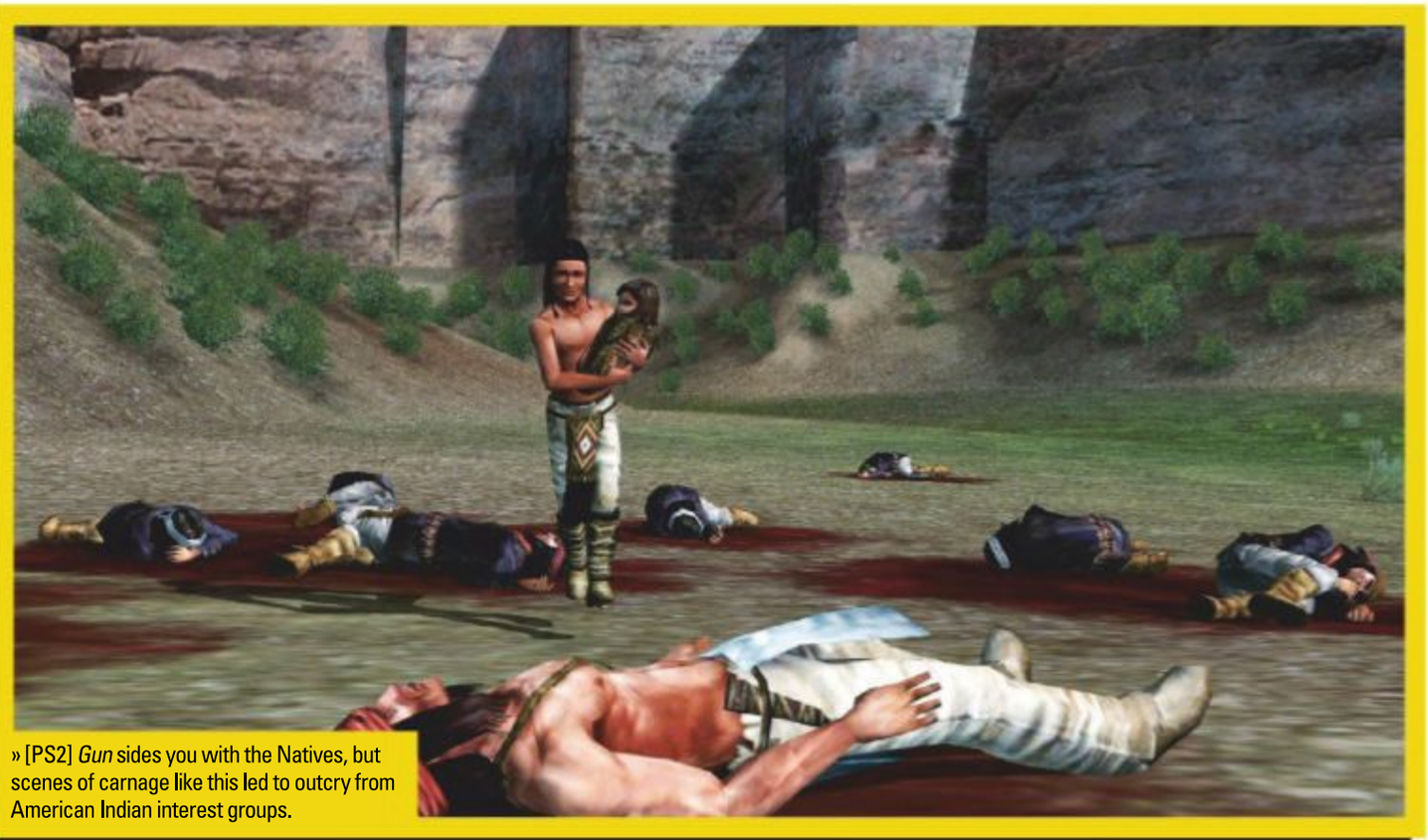
Some mighty fine legendary beasts roam these here lands, and the good folk of *Gun* won't be hearin' no addle-headed talk of how some '*Far Cry*' or that high-fallutin' *Red Dead Redemption* came up with the idea first.

RANCHING

You can't go callin' yerself a cowboy when you ain't so much as rustled an Acorn Calf in yer life. So holster those six-shooters, get on down to the ranch, and show that you can do the kinda work that regular folk round here do every day.

HORSE RIDING

Now how d'you expect to go gallopin' atween this towns when you've never ridden a realistic horse afore? Yerp, ain't no horse-ridin' in 2005 that felt so smooth as this. Just you mind not to hurt your horse by overwhippin' him now.



» [PS2] *Gun* sides you with the Natives, but scenes of carnage like this led to outcry from American Indian interest groups.

the game's finest). Then there's a winding canyon pass between Dodge and Empire City that was made for a stagecoach mission between the cities. "This crazy-complicated system gave the artists a tough job," Scott chuckles. "We'd just bolt a ranch onto a desert onto a snowy mountainside and say 'Now make all the art for it.'"

Gun was developed in 18 months – a short turnover which led to some visible sacrifices. One of these is the chapter where Colton White works with the corrupt Mayor Hoodoo Brown in Empire City. The team's original plan was for the player to do missions alongside each of the mayor's lackeys and see the extent of his corruption before he (unsurprisingly) double-crosses you. In the final game, you meet the mayor, and are duly betrayed in your very first mission for him. "In the end, we just didn't have enough time. You can feel it in the end-product," Scott laments.

But these were teething issues in a game that felt like the first step into a major new IP. Gun is mechanically fluid, and one of the first games to really make shooting while on horseback feel right, leading to some excellent ride-and-gun sequences through the game's scrublands and canyons.

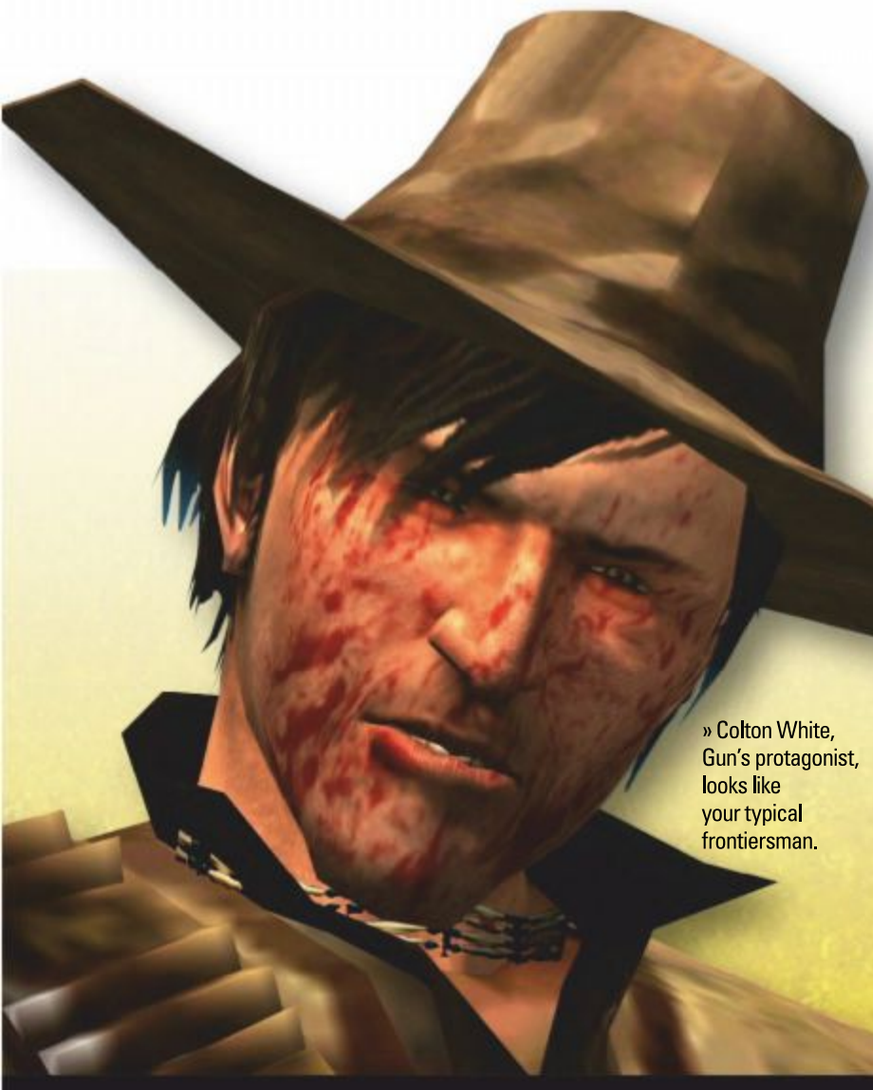
> "We put way too many reminders about how to stay on the story track"
>
> Scott Pease

There are quite a few novel systems in there, too. The explosion physics lets you throw a stick of dynamite towards enemies, then use the slow-motion ability to shoot it in the air as it descends on them. Then there is the subtle faction system – crafted by a former Rockstar developer – which causes, for example, the Chinese in Empire City to have shootouts with the local gunslingers.

With Gun's forward-pushing story, it's quite easy to overlook such fine details, as well as the side-missions that bolstered your stats much like an RPG (which would cause a lot of players to hit a wall when reaching Hollister and Father Reid – a gruelling double-header of late-game bosses). "This one's my fault," Scott confesses. "We put way too many reminders about how to stay on the story track. I was a little gun-shy that people would lose the story track, and in hindsight should've trusted players to go off and engage with the world more."

Gun's brisk development was self-imposed by Neversoft to hit the 2005 Christmas window and the launch of the Xbox 360. Designed for the outgoing PlayStation 2, Gamecube and Xbox generation, Gun was in a tough position for a new IP. Neversoft decided late on that it needed to have a presence on Microsoft's seminal console.

"It was just a case of, 'Get it working on an Xbox 360,'" Scott says. "We updated some texture resolutions, and normal maps were the new thing back then so we included them even though we had zero experience working with them," Jon Bailey adds.



» Colton White, Gun's protagonist, looks like your typical frontiersman.

» [PS2] Not unlike Red Dead Redemption's Dead Eye system, you can go into slow motion and quickly switch between targets to rack up kill combos.

Gun did well upon release, eventually selling nearly 2 million copies across all platforms. But these numbers were unremarkable for a publisher like Activision, and Scott was frustrated by its marketing; its messy trailers and hard-hat yellow box art downplaying the fact that it was a western. "The potential names for the game these guys came up with were so cheesy that we just stuck with Gun – the shorthand title we used to file the game at the studio", Scott tells us. "And to make that skull-and-guns box art fit better with the narrative, we took the image and pasted it onto the front of Magruder's train."

Nevertheless, an option to make Gun 2 was on the table for Neversoft in 2006, and Scott believes it could have been the breakthrough the series needed. "We had the foundation of a really fantastic engine," Scott rues. "There are very few really big open world engines that exist, and games are constantly made on them – whether it's Assassin's Creed, Rockstar games or whatever. Unfortunately we didn't have the foresight to see that we could sit in that territory".

The plan was to make a sequel to Gun and keep at the Tony Hawk's series, but when Activision bought the rights to Guitar Hero in 2007 and offered it to Neversoft, a decision had to be made."There was no way we'd be making three games, and Guitar Hero was 'all hands on deck'; we had to decide what to cut and what to keep".

Gun 2 was cancelled, and Neversoft returned to the relative comfort of making record-breaking franchise titles for Activision, including Guitar Hero III: Legends of Rock in 2007. But Scott still sometimes imagines an alternative timeline for Neversoft. "Much of the awesome talent that worked on Gun left, because they came to make adventure games," he says. "The tough thing in hindsight is that maybe there's a world where we keep going with Gun and put Tony Hawk's to rest for a little while".

And maybe that's a world in which Gun, not Red Dead, would define the western genre today. But even though it's long since been buried in the desert, its makers can take pride in being unsung pioneers of a genre. Like a lone rider silhouetted against a blood-red sunset, Gun trotted the open-world western onto the videogames horizon.

Hardware Heaven

LaserActive

» **MANUFACTURER:** Pioneer Corporation » **YEAR:** 1993 » **COST:** $970 (launch), (£150+ today)

It's easy to dismiss Pioneer's entry into the videogame market. After all, it wasn't even released in Europe, being available in Japan and America only, and it just looks like a large high-end CD player that would be more at home as part of your hi-fi set up than in your games room. Nevertheless, looks can be deceiving and a closer inspection of the hefty machine actually reveals it to be an all-singing, all-dancing multimedia player, a machine that could pretty much do anything at the time of release, aside from actually become a success for Pioneer.

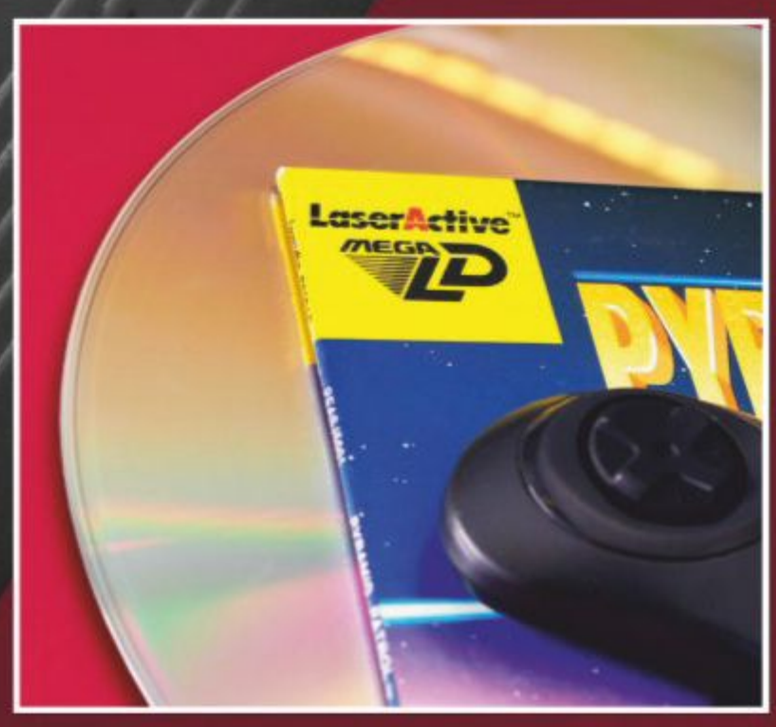
It's worth noting that the LaserActive really could do it all, whether it was playing the latest LaserDiscs or Compact Discs, having a karaoke session thanks to its ability to play LD-G discs, or simply play games. The machine itself didn't have a fantastic array of exclusive games and many were FMV-based like Time Gal, Road Blaster and Triad Stone. All games required special PAC modules in order to play them, and Sega's was by far the most popular as it allowed LaserActive owners to play a variety of LaserDisc games, alongside Mega CD games and Mega Drive cartridges, something which opened up the machine's library substantially (but at a very high cost of $600).

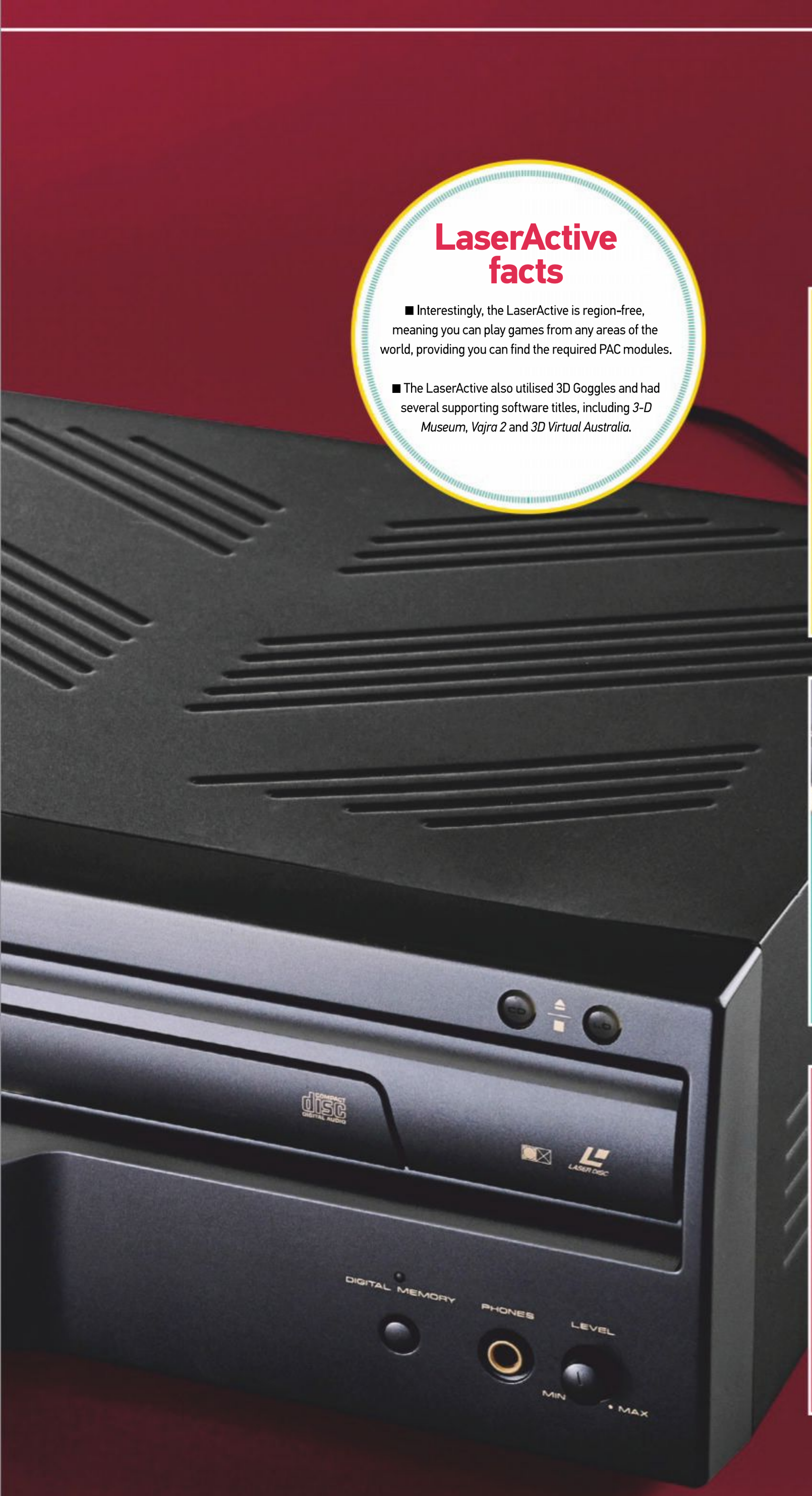
There was even a PAC module for NEC's PC Engine (NEC itself would release its own system called the LD-ROM² System) which was rarer to find at the time (and now fetches a handsome price on the second-hand market), but it didn't help at all. Pioneer's expensive price point (nearly $1,000 in the States) and the fact it was utilising largely underpowered technology meant it simply couldn't compete with the incoming consoles from the likes of Sega, Sony and 3DO. As a result it remains a bizarre footnote in gaming's history.

LaserActive facts

■ Interestingly, the LaserActive is region-free, meaning you can play games from any areas of the world, providing you can find the required PAC modules.

■ The LaserActive also utilised 3D Goggles and had several supporting software titles, including *3-D Museum*, *Vajra 2* and *3D Virtual Australia*.





SYSTEM SUPPLIED BY **NEIL THOMAS**

STOO CAMBRIDGE

From VIC-20 to mobile phones, Stuart 'Stoo' Cambridge has been drawing pixel art and making games for decades. Best remembered for his work at Sensible Software, Stoo reminisces about the hardware, the hard work and hairstyles

Words by Andrew Fisher

"I'm a great believer in telling people that I appreciate their interest, because I genuinely do," says Stoo, as we discuss the love people have for his old games. "I love pencil art, I love sketching and proper, detailed artwork with pencil and watercolour." You can see examples at stoocambridge.com. "When you do digital art, it's so forgiving because you just erase or undo it, but when you've got a piece of paper, it's like you are building something physically. You can hold it and say, I did it. I am actually an artist," he laughs, "but most of my known work is through pixel art!" We look back to how Stoo began pushing pixels.

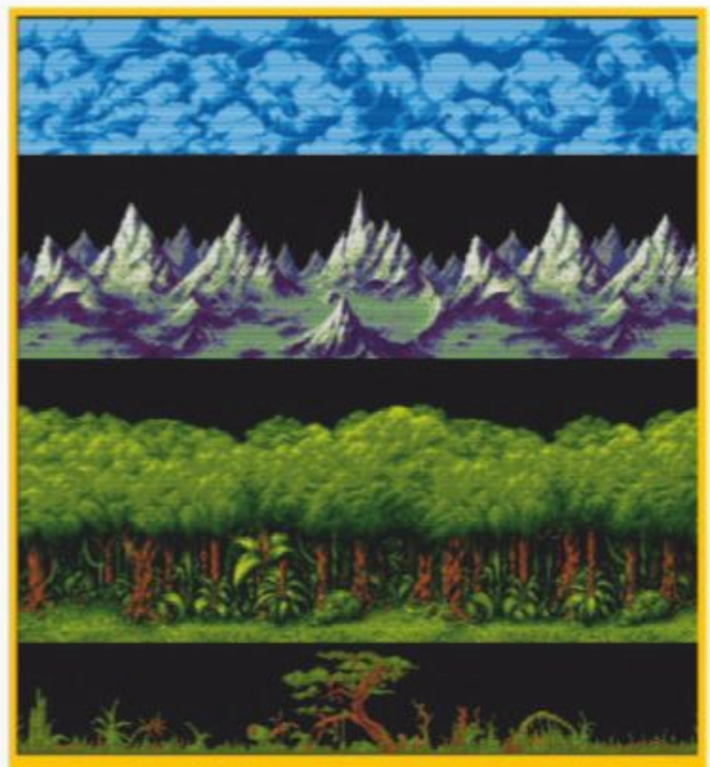
What were your earliest computing experiences?
At school, we had BBC Micro computers. I wanted a Commodore 64, and my dad said, 'They are a lot of money but we will get the VIC-20, it looks the same and if it takes off we will get you the Commodore 64 next year.' I got a VIC-20 with Abductor and Laser Zone, and absolutely loved it.

When did you start experimenting with art and making videogames?
I used to do doodles on graph paper and read all the computer magazines, ZZAP!64 being the biggie – I used to love it when someone did a diary of a game. I started mucking around on the VIC.

Did you have any formal art training?
I failed my O Level. My teacher said because you have not finished your artwork, they are going to mark it down. I never went to art college. I wish I had now, I would have learnt a lot more and quicker, rather than through experience. Just reading and looking at artists you like, picking things up as you go. Trial and error – if it looks rubbish, you try again until it looks great.

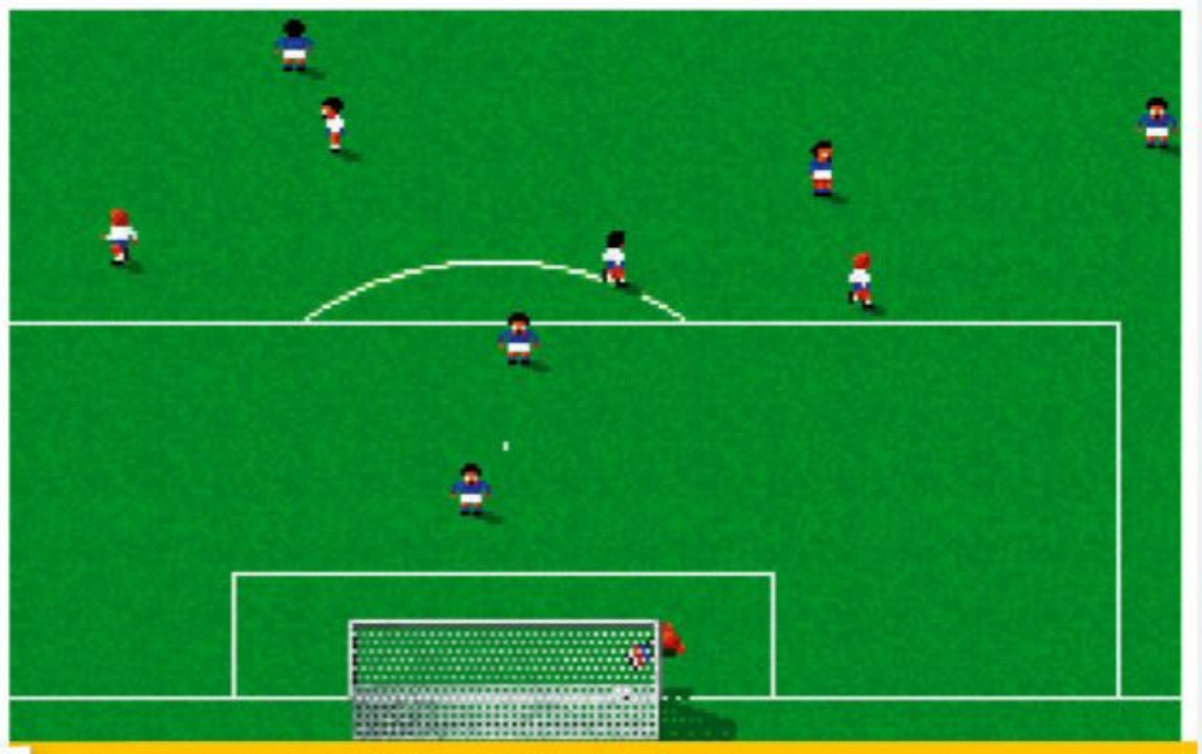
Then you moved onto the C64?
My mum and dad said, 'We will get you a Commodore 128 for Christmas'. I have really fond memories, setting it up on Christmas morning; Rambo was the first game I loaded.

You created Battle Ball, using Shoot-'Em-Up Construction Kit from Sensible Software…
I'd coded a few bits, I wasn't at the stage where I finished a game. I tried SEUCK, put some ideas into it. I thought I might as well see if anyone's interested in publishing it. Most said, 'No, this is a SEUCK game, we don't touch that.' The Power House said, 'We'll have it off you.' They went under before it was published. I can't remember what I got, but it was enough to save up for an Amiga 1000. There was a computer shop in Huntingdon, and they had some in stock. My dad said, 'I'll take you to pick it up.' A brand-new all-singing all-dancing, machine, and not many people had them. And then Deluxe Paint was just crazy. That was the change of everything.



» [Amiga] The four strips of eight-colour graphics that make up the jungle intro sequence from Cannon Fodder (image by Stoo Cambridge).

How did you start doing freelance work?
I was working as a British Rail signalling technician. A friend said one of his friends who had got games



» [Jaguar] Stoo's sprites may be tiny but they remain extremely expressive.

"I used to do doodles on graph paper and read all the computer mags, ZZAP!64 being the biggie"

Stoo Cambridge

» [Amiga] Stoo created some glorious artwork. This is from The Executioner.

SELECTED TIMELINE

GAMES

- **BATTLE BALL** [1988, UNRELEASED] C64
- **RENAISSANCE 1** [1990] AMIGA
- **THE FINAL CONFLICT** [1990] AMIGA, ST
- **FEUDAL LORDS** [1990] AMIGA, ST
- **INSECTOR HECTI IN THE INTER CHANGE** [1991] AMIGA
- **THE EXECUTIONER** [1991] AMIGA
- **THE LAST STARSHIP** [UNRELEASED] AMIGA
- **MEGA-LO-MANIA** [1992] MEGA DRIVE
- **CANNON FODDER** [1993] AMIGA
- **SENSIBLE SOCCER: EUROPEAN CHAMPIONS 92/93 EDITION** [1993] AMIGA
- **CHAMPIONSHIP SOCCER '94** [1993] AMIGA, PC
- **SENSIBLE GOLF** [1994] AMIGA
- **CANNON FODDER 2** [1994] AMIGA
- **WORLD CHAMPIONSHIP SOCCER II** [1994] MEGA DRIVE
- **SENSIBLE WORLD OF SOCCER: EUROPEAN CHAMPIONSHIP EDITION** [1995] AMIGA
- **SENSIBLE WORLD OF SOCCER** [1995] AMIGA
- **SENSIBLE SOCCER: INTERNATIONAL EDITION** [1995] JAGUAR
- **HAVE A NICE DAY** [UNRELEASED] PLAYSTATION
- **JOE BLOW – ADVENTURES IN DREAMWORLD** [UNRELEASED] PLAYSTATION
- **ROAD RASH II** [2000] GAME BOY COLOR
- **ALONE IN THE DARK: THE NEW NIGHTMARE** [2001] GAME BOY COLOR
- **ALIENATORS: EVOLUTION CONTINUES** [2001] GAME BOY ADVANCE
- **XXX** [2002] GAME BOY ADVANCE
- **STAR WARS: EPISODE II - ATTACK OF THE CLONES** [2002] GAME BOY ADVANCE
- **SPIDER-MAN** [2002] GAME BOY ADVANCE
- **DR. MUTO** [2002] GAME BOY ADVANCE
- **MUCHA LUCHA! MASCARITAS OF THE LOST CODE** [2003] GAME BOY ADVANCE
- **CANNON FODDER MOBILE** [2004] MOBILE
- **PREMIER MANAGER 2004-2005** [2004] GAME BOY ADVANCE
- **MONKEY KING** [2004] MOBILE
- **SENSIBLE SOCCER** [2005] XBOX 360
- **BRITISH LIONS RUGBY** [2005] MOBILE
- **ALIEN HOMINID** [2006] GAME BOY ADVANCE
- **ACTUA SOCCER 2006: INTERNATIONAL EDITION** [2006] J2ME
- **FAMILY GUY: STEWIE'S ARSENAL** [2007] MOBILE
- **BLOBBIT DASH** [2007] MOBILE
- **BLOBBIT PUSH** [2008] MOBILE, WEB
- **YAMAHA SUPERCROSS** [2009] PS2
- **DOCTOR WHO: RETURN TO EARTH** [2009] WII
- **1000 TINY CLAWS** [2011] PSP
- **THE DWARVES OF GLISTENVELD** [TBC 2019] PC

published was looking for artists. I gave him a demo disk, he gave it to the guy at this games company, and I got a gig doing graphics for Impressions. That's literally how I got in. I had tried to go around some of the publishers, but because I hadn't done anything I got a lot of rejections.

I did Renaissance 1 – Space Invaders, Galaxians, Centipede and Asteroids in classic and contemporary versions, and I had a brilliant time. I got other offers and spent about a year doing projects with Impressions before I saw an advert for Sensible Software.

> "You have such a passion for what you are doing you don't mind" Stoo Cambridge

You literally responded to an advert?

It said Sensible were looking for programmers and artists. I ummed and aahed, because I was a megafan of Sensible; I played Wizball the whole weekend. I thought, 'I've got nothing to lose.' I put together some portfolio work and some bits that weren't published. I got this letter back, 'We would like to invite you for an interview.' My mum and dad took me up to March in Cambridgeshire. Later on they said I'd got the job.

What was it like, working at Sensible?

It was absolutely fantastic. It was hard work, you had to put the hours in – you have such a passion for what you are doing you don't mind, because you can see there will be a result.

Before I started, Chris Chapman was finishing Mega-Lo-Mania on the Amiga. I'd recently bought myself an Amiga 1500, and Chris hadn't had a machine to test with a meg of chip RAM. He said, 'Can I send you some Mega-Lo-Mania in the post?' So I did a little bit of game testing. It worked fine and it was great.

I did an all-nighter pretty much as soon as I started, on Sim Brick. That was me being naïve – [I thought to myself] 'Let's get these graphics done so when everyone comes in they can see it.' That was quite trusting to leave me there all night, on my own. I could have run off with all the gear! [Laughs].

With Cannon Fodder, were you involved in the game's design?

Initially no, it was literally a piece of paper with some ideas. A lot of it was trial and error – on paper it looks great, but as soon as you put it in, it doesn't feel right. Jools [Jameson] and I added our own bits, he was doing code and I the graphics. It would be unusual at Sensible not to get involved with some of the design. Jon and Chris did the bulk of the designing – most of the level design was Jon, Jools did a couple and I did a few.

How do the level intros work?

Jools was new to the Amiga, which is madness when you think how good the game was coded. I said to Jools, 'You've got this mode called Dual Playfield, and they are like eight colours each. And you can overlap them – if you split the screen with the copper halfway down, you can use that one there and there, [Stoo gestures with his hands], you've got one and two, one and two. We can have a lovely parallax effect.' He looked in the programmer's manual, this great big book, to see how you did it. I gave him the artwork, four sections of eight-colour art that repeated, and a helicopter, using hardware sprites. He coded it and it was 'Wow, that's

» [Amiga] Cannon Fodder is another Sensible Software game where Stoo's distinctive designs shine.

MAGIC FROM STOO

Games from Stoo's library you should check out

BATTLE BALL (C64)
■ Frank Gasking of gtw64.co.uk helped archive this unreleased game from Stoo's disks. It is fairly standard *SEUCK* fare as the Battle Ball moves through the push-scrolling landscapes, but it has some nicely polished explosions/death sequences.

CANNON FODDER (AMIGA)
■ War has never been this much fun, and best played with a mouse on the Amiga. You get attached to the little soldiers, especially as they gain ranks. Much of Stoo's presentation was reused for the game's sequel.

MEGA-LO-MANIA (MEGA DRIVE)
■ Stoo enjoyed working for the Mega Drive, and this is a slick port of the original. It still stands out as being accessible, as you design new weapons of increasing power and attack enemy buildings to survive through the epochs.

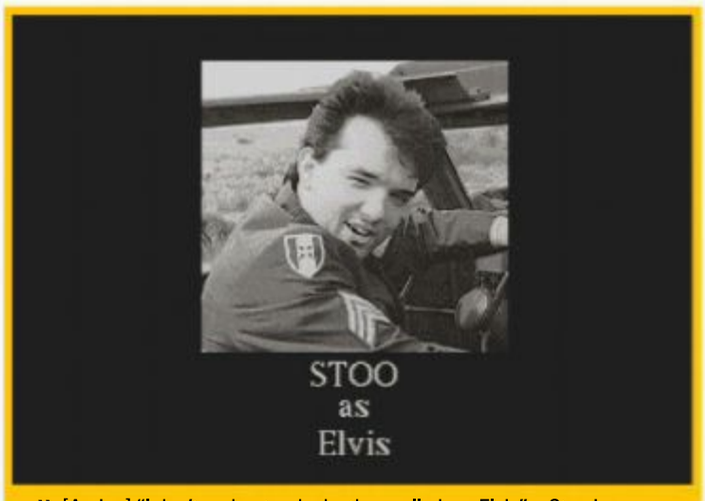
ALIEN HOMINID (GAME BOY ADVANCE)
■ The game that brought developer The Behemoth to public attention, distilled into portable form. Stoo was one of several artists who helped transfer that distinctive art style along with the rock-hard game design.

BLOBBIT PUSH (WEB)
■ Being remade after appearing on Facebook, a quick search of the internet will reveal the Java version to play in a browser. Help rescue the baby Blobbits in 50 screens of crate-pushing puzzle action inspired by *Soko-Ban*.

exactly as I thought it.' In hindsight, I could have pushed for another couple of layers. I wanted to bring that 'wow' from an arcade game into the home.

Stoo, you're one of the foot soldiers, have you survived a long time?
I walk with crutches and sometimes crawl because of the war wounds… [laughs]. I don't know if it was Jon or Chris who had the idea to put names to the characters. Originally it was first and second names, then we realised that was a lot of data. Putting us in at the start means we are there every time someone plays – so it's good self-promotion. If you did it now, you'd have them looking like us. The sprites were only ten or 11 pixels high, so you couldn't get a lot of detail.

What was your perspective on redrawing the poppies for Cannon Fodder?
We'd worked on this game for 18 months, and it was a slog – you'd send stuff in, Virgin's QA department would send back a list of bugs. Then you get, 'We're going to have to redraw the poppies.' I suppose the poppies is my fault, because I used the Royal British Legion poppy. I didn't even think to go out and pick a proper poppy – I couldn't say that after a few beers. I was really pleased with that original one. There were some poppies growing around the corner from our new offices in Saffron Walden. I picked a handful, brought them back and taped them to the monitor. There was one for the title screen and two when you finish a mission. That appeased them, job done.

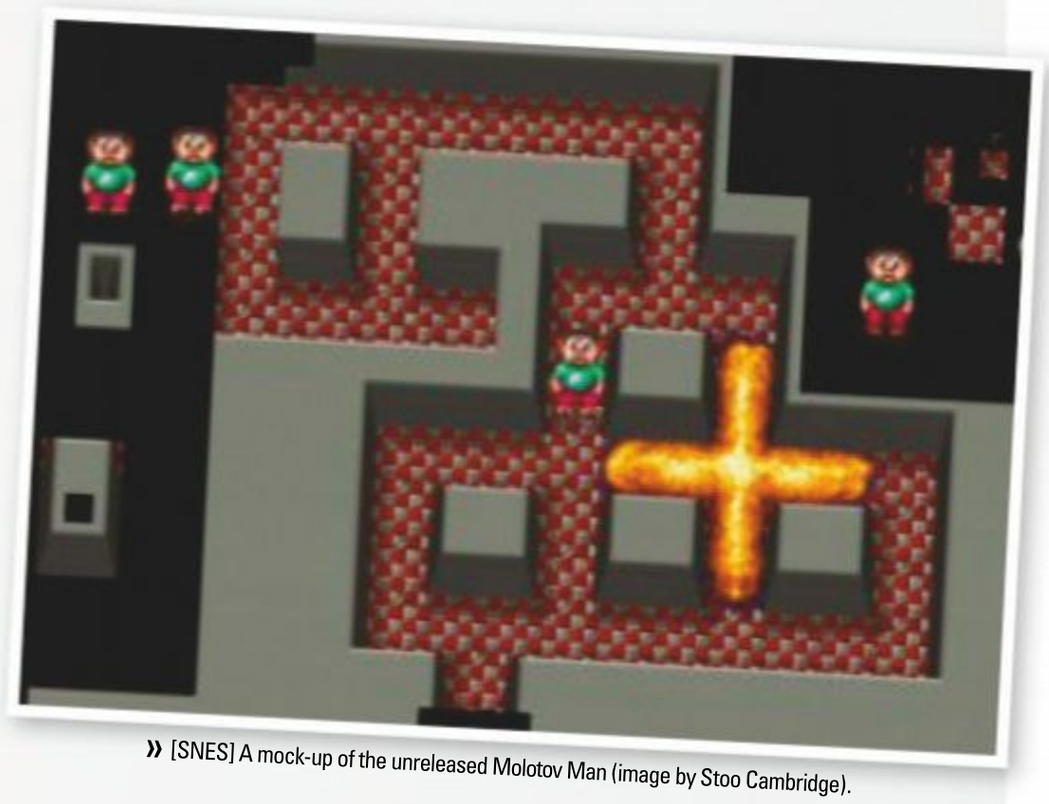


» [Amiga] "I don't understand why they called me Elvis" – Stoo in Cannon Fodder's intro.

How were the stills in the intro produced?
We did the movie in a day, near Sible Hedingham. We shot the video and there were lots of photos taken. We didn't have a scanner at Sensible, so Graftgold said, come and use ours. They were in Witham, not far from Saffron Walden. They scanned the photos in, we got them back, 256-colour greyscale, and I converted them into 16-colour for the Amiga.

Cannon Fodder got a sequel. How involved were you?
I wasn't involved at all, I wish I had been, but I was doing Sensible Golf. They took my original graphics and based the new stuff on top of them.

What happened with Super Nintendo game Molotov Man?
I really wish that Chris had got somebody interested in taking that, it was pretty good. Not a huge development time, it was literally a concept demo. It was like Bomberman, throwing Molotov cocktails; you get the cross-shaped explosion. For me it would have been great to have worked on it to get some experience using Nintendo's hardware. I preferred the Mega Drive, even though the palette wasn't as good.



» [SNES] A mock-up of the unreleased Molotov Man (image by Stoo Cambridge).

You converted Mega-Lo-Mania's graphics to Mega Drive…
The originals were by Jo Walker, in 32-colour. The Mega Drive can't display 32 colours, so there are two playfields of 16 colours. I ended up splitting the Amiga image into two layers. They had to be smaller as well because the Mega Drive didn't have a lot of video RAM. Because the original artwork used a lot of stippling, I had to go through and restipple every image once it had been scaled. I was really pleased and proud of that work. Jools wrote all the tools on the Atari ST to do the conversion. I had to use an Atari ST to do the graphics, then convert them into his raw format.

I said, 'Can't we have this on the Amiga, it's easier for me?' He said, 'No, I've got the tools on the ST.'

'I've got to put them on a disk, over to the ST, get them in there and take them back again,' [I said] – and he's just like, no. Programmers, don't you just love them? [Laughs].

Back then, you couldn't run away with how many animation frames you had, not without some compression system. There was lots like that you just took as part and parcel of doing the work. It honed your skills. It was a nice time to get into games development. From 16-bit on that whole period was… I don't want to use the phrase 'a golden age', but it was a really good time to develop games.

A time you could put the Sensible spin on an existing genre, as in Sensible Golf.
Jon and Chris talked to me about doing a golf game. Jools cut them a deal where he could reuse the Cannon Fodder engine. Jools was doing Cannon Fodder 2 and Golf at one point, which isn't great. The tiles in Cannon Fodder were 16 by 16, and in Golf they were 16 by

> My daughters were really young and I wasn't seeing them. It was terrible. Everything came crashing down.
> Stoo Cambridge

» [Mega Drive] While he's largely connected to the Amiga, Stoo has worked on other systems, including the Mega

THE LOST STARSHIP

Stoo on his unreleased shoot-'em-up

"*The Last Starship*... That was just before I left working with Impressions and started at Sensible Software. Imagine the guys who coded *Turrican* taking over and doing a scrolling shoot-'em-up. That sort of coding experience would have been ideal to do it. Unfortunately, it never happened and I did all these lovely graphics," explains Stoo. "I'm a big fan of arcade games of that time, I was trying to capture that look. There were three sets of graphics, the third set wasn't quite complete. There was a couple of demos that I do have somewhere. It used to crawl along, the demo was so unplayable. Unfortunately the screenshots look better than the actual game running, but I would like to do have done something with that."

Could Stoo ever go back to the game? "I have looked at that and whether it's worthwhile resurrecting them... I got paid for the work but it never actually went anywhere. Because I was freelance, there was no contracts back then to do it, it was literally all word of mouth. The company got sold to Sierra and then to somebody else. I'd have to redo lots of new graphics for it. Who knows?"

» A mock-up of how TLS would've looked (image by Stoo Cambridge).

eight. We wanted more control over angles. When you look at Golf, you've got that panel down the side, the same as Cannon Fodder, the file names are the same. I do like Sensible Golf but it came out in an unfinished state, as far as I'm concerned.

Were you involved in designing the courses?
Jon or Chris did a lot of the course design, I did some as well. Again, it was on bits of graph paper and I put them on using the editor... I have got the disk somewhere. I've got to find it, 'cos it would be a shame to let it disappear into eternity.

You did another Mega Drive game – World Championship Soccer II.
The hush-hush project. We don't know nothing about that one. [Laughs]. It was just a football game, 'It's a Sega football game and you can't say anything to anybody'. I didn't sign any NDA, I just got paid to do the work. It was based on the Sensible Soccer engine, which is why they've only got five frames of animation, the middle one doubles up as the 'stand'. There's one release with a blue cover worth serious money now. I wish I'd managed to get some freebies!

And the long haircuts...
The Lovejoy mullet! I'm a big fan of the show Lovejoy. When you look at Ian McShane, he's got that mullet... Lovejoy was filmed in Saffron Walden. So this Sega game has got Lovejoy in it without anybody knowing – until now. [Laughs].

Do you have any more funny stories from when you were at Sensible?
The classic is when some monitors were thrown out of the window by Chris Yates. The other was when he decided to take the ROMs out of one of his pinball machines downstairs and reprogrammed the text for obscenities. The day out filming for Sensible Soccer, with Captain Sensible. He brought a bottle of scotch with him, and he'd try and have this bottle in every photo, but we did get to stand on the Wembley pitch.

When Cannon Fodder was released, I was in a computer shop and there were these schoolkids looking at Cannon Fodder and I said, 'That game is really good, you should definitely buy that!'

You moved on from Sensible Software and started a company.
Abstract Entertainment, with Sensible colleague Chris Denman. Sensible wasn't quite the same, with Sex 'N Drugs 'n Rock & Roll seemingly taking precedence over everything... I thought, I'll get out while the going's good. I came up with this idea called DJ Fresh and it was a rapping radish, based on Kickle Cubicle – a 2D, single-screen puzzle game. Then we looked at turning this into something bigger, so it scrolled.

We presented to a few publishers and nobody was interested. Telstar said, 'Could you turn it into a 3D platform game?' We were so desperate and said, 'Yeah'. It wasn't the best decision. We went away and worked our backsides off on this 300-page document – all the character designs, stories, music, and sound effects. We took it back and they signed us; we walked out with a cheque, and we were like, 'Wow we've made it!'

» [Amiga] Many feel Sensible World Of Soccer is one of the best 2D football games around, and it's hard to disagree.

» [PlayStation] A rare glimpse of the unreleased Joe Blow (image by Stoo Cambridge).

» [Web] Blobbit Push has 50 challenging levels to get through. The main character was inspired by The Trap Door.

We went in for a 20-month development time but they wanted 14. Again we knew, we couldn't say no. It turned out to be a nightmare. It started off brilliantly, we got what we thought was a good 3D coder. He was out of his depth, he walked out in the middle of the night a week before the ECTS trade show. It just so happens that day I was interviewing for an artist, and that was Kris Daniels. He said, 'Well, I can program' and I said, 'If you can take this code and make it run – even if it is rubbish, so people can see something running – you've got a job.'

A week before ECTS and we've got a game that didn't compile! Kris came back and said, 'I've fixed it. But there's no game there.' We thought the programmer was building up this really cool 3D system with all the game mechanics. Kris ended up taking over the project, then my business partner left so it was just me running the show. For the next two years we turned it round and got Joe Blow running. Kris did a fantastic job with the game engine, the artists were doing great work. It all started to go pear-shaped towards the end of year three. The parent company pulled the plug on Telstar Electronic Studios and we were one of the companies that suffered. I couldn't get anybody to take the game to finish it.

That's when I lost the plot a bit. My daughters were really young and I wasn't seeing a lot of them, I was working at the office all the time. Three years for nothing. It was terrible. Everything came crashing down.

It must have been tough. Sensible also struggled with 3D, Have A Nice Day was cancelled…

Chris Yates said, 'We're doing a 3D game, on the new Sony machine' which was called the PSX at the time. 'If I give you 3D Studio, can you learn it and we'll get some levels going?' I got a PC and taught myself 3D. I got the levels done, and loads of graphics. It became apparent there were technical issues because the polygon count was so high. Another one bites the dust.

In recent years you've done web and mobile games.

Once Abstract closed down, I went back to freelancing – I needed to earn some sort of money. It wasn't great, but it was okay.

You've been to a few retro events, are you enjoying the nostalgia?

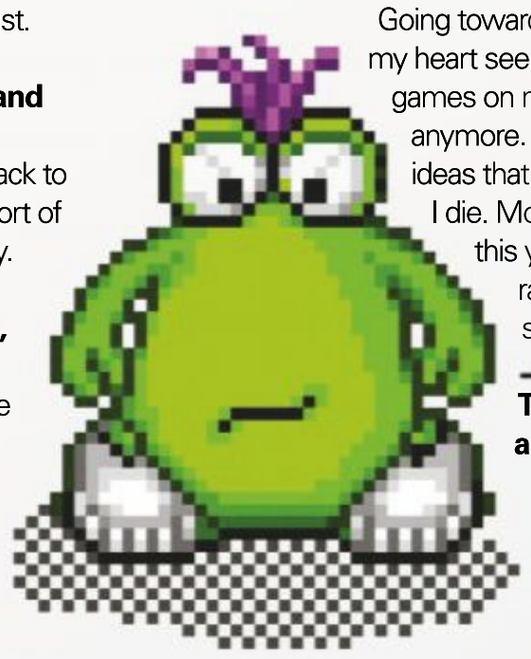
I really do love it. When you hear some people say they turn their nose up at their old stuff, you think, without that you wouldn't be where you are. All those hours and nights, sacrifices you made with your family and your friends to get these things done – it was worth it, because people are remembering it, still remembering the cover disks. At the time, what a pain in the arse they were. You're making a game, you're full-on, and you've got to stop what you're doing because there's a cover disk to be done. Sensible Startest was a good laugh. I'd never met Richard Joseph, I had no idea what he looked like, and so I was going on Jon's description. Which is why it doesn't look anything like him.

Where did Blobbit come from?

I'd worked with Mark Ripley in the past. He said, 'I've got this demo – could you come up with a character?' Mark liked Trap Door, and I said, 'I'll knock up this sprite in green,' I moved it so the mouth was quite low down and he had these arms, googly eyes and a little bit of purple hair on top. It went through a few revisions and got it into Blobbit Dash, on J2ME mobiles. We made a few quid to cover our time, and we left it. I had all these ideas flooding into my head – where does he live? What does he do? What do they eat? Blobbit initially was his name, but it's what he is – a Blobbit. I expanded and expanded it, created this whole world. I have a book I have been writing – characters, plotlines, and a whole Blobbit galaxy of stuff.

We did Blobbit Push on mobiles. That had 50 levels and was good fun, then we left it for about ten years. I said to Mark, we could bring another one out. It's not Blobbit Push 2, it's like Blobbit Push 1.5 because it uses the old levels brought up to date. We started that last year, revamped all the animations and graphics. The whole Blobbit thing, I do feel like its future is in print rather than games. I will be finishing the book at some point in the future.

Going towards writing and illustrating is where my heart seems to be leading me. Making games on me own just doesn't do it for me anymore. I have got so many designs and ideas that I need to do something with before I die. Mortality is rearing its head – I'm 50 this year, where's the time gone? If I'm rambling on too much, tell me to shut up…



Thanks to Stoo for his time and screenshots.

YOU ASK THE QUESTIONS

Stoo answers your burning questions

MR. JENZIE: When you saw your character in Cannon Fodder die, what were your feelings?

Ouch! Should have worn me iron underpants today! [Laughs]. How dare you kill me off! It was really weird; you want them to do well because you identify with them. It was funny, if you were at a show, where the game was being played, back then nobody knew who you was, the internet wasn't about. People wouldn't know that you were from Sensible, and you did the graphics… couldn't you have shot Jools instead? Sorry Jools!

DRS: What artists from outside the games business have influenced your art over the years?

I obviously like Giger, I did The Executioner which is very inspired by Alien. Chris Foss is good, I like his sci-fi stuff. I've got his book Space Wreck, my aunt bought that for me when I was 12 and that blew me away. Angus Mackie was another one. The guy who did all the covers for Psygnosis – Roger Dean, I love his stuff.

RORY MILNE: How much fun was Jon Hare to work with?

I love Jon, he's a friend of mine, and he's a lovely guy. Jon has got his ideas in his head and he knows what he wants. If you are doing something, and you don't get it how he wants it, he'll say, let's try it this way and he won't stop until he gets the image or the look that he wants. I'm happy to work like that, because I'm being paid to do a job. I never had any problems working with him, he's great.

THE LAIRD: What was the Jaguar hardware like to work with?

I didn't really do a lot on the Jaguar, but I knew enough to enjoy it. […] It was capable of so much. It's just a shame it never got the love it deserved.

3200

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CREDI

Virtua Cop

"I'M GETTING TOO OLD FOR THIS SHIT"

» SATURN » 1995 » SEGA AM2

Some of you may remember from last month that I've started getting back into the Sega Saturn. As is customary for my collecting binges, I have been buying games in bulk, because they typically offer the best overall value, and I'm all about the value. One of my recent purchases included Japanese copies of Virtua Cop, Virtua Cop 2, Decathlete, Sega Rally and The House Of The Dead – the latter alone sells for around £25.

Putting on Virtua Cop, it suddenly dawned on me that I've never actually completed it. "No problem," I said to myself, "I'll get it completed now and that's another game I've knocked off my list for the year (I've currently finished ten games so far, in case you're interested). So I went up into my loft, grabbed my lone lightgun and proceeded to play… and lost all my credits within the first level. Virtua Cop might move at a relatively sedate pace, but the attacks from enemies are fast and furious, and they immediately caught me off-guard. I went back to the menus and adjusted the credits to nine and my hits to the same number, effectively giving me 81 lives to complete the game's three stages. Easy peasy.

And I still couldn't do it. I would play every night, and with each attempt I would make slightly better progress and could usually reach the beginning of the third stage, which appears to be a Die Hard tribute as it largely takes place in a large corporate tower. Slowly, but surely, over the course of a week I managed to get to the final closing moments, only to die when I encountered the last boss. I immediately restarted, around 1am in the morning, knowing that this time I would do it. This time I was ready.

I was ready, and I killed that sucker with two health bars left. Elated, I reached for my phone to text my retro gaming cousin that I'd finally completed the game, only to see an even bigger boss turn up in a fighter jet. Completely unprepared and outgunned, I died within a few seconds of him turning up. Needless to say I have still not completed Sega's outstanding shooter.

RETRORATED

>> This month we play through Yoshi's latest game, have no objections to playing the Ace Attorney trilogy and discover how the latest Devil May Cry fares

» [Switch] You'll discover plenty of clouds to pummel with eggs. Look carefully as many are very well hidden.

Yoshi's Crafted World

THE YOSHI'S ISLAND SEQUEL WE'VE ALL BEEN WAITING FOR

INFORMATION

- **FEATURED SYSTEM:** SWITCH
- **ALSO ON:** NA
- **RELEASED:** OUT NOW
- **PRICE:** £49.99
- **DEVELOPER:** NINTENDO
- **PUBLISHER:** GOOD-FEEL
- **PLAYERS:** 1-2

We're glad that games like Yoshi's Crafted World exist, because they prove that you don't need to have incredibly powerful hardware in order to create amazing-looking games. Building on the yarn-based aesthetics that featured in Yoshi's Woolly World, Good-Feel has doubled down for its follow-up, delivering a exquisite world filled with an assortment of hand-crafted environments that look like they've been assembled by Neil Buchanan on an Art Attack special.

The cleverly assembled household items aren't just there to look nice however, as they've been created with loving purpose. Rolls of paper unwind to create new paths; magnets can be manipulated to either open doors or stick to nearby tin cans to create new access platforms; balloons act as launch pads to reach otherwise inaccessible areas, while cardboard can become deadly, crushing unwary enemies. This ingenuity extends throughout Yoshi's Crafted World ensuring that there's always something new to discover and always a reason to revisit a stage to ensure that you've found every last item.

This sense of discovery is driven home by Yoshi's new ability to now shoot eggs into and out of the screen. Good-Feel's world is full of cardboard bushes, hanging ornaments and sneakily placed Shy Guys, and your enhanced egg throwing skills allow you to poke and prod the beautiful environments to your heart's content. It feels like there's always something to do in Crafted World, always something to see and like the original Yoshi's Island it feels like a believable solidly crafted world that revels in its unique aesthetic and runs with it.

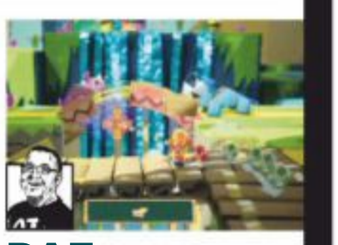
Of course, long-term fans of Yoshi will be well aware of his penchant for collecting and it's no different in Crafted World. Each stage has several flowers to collect, with additional flowers being granted for collecting 100 gold coins, 20 red coins and finishing a stage with a full complement of health. It's worth noting, however, that the clever level design means that this is a far harder task that it ever was in more recent Yoshi games.

» [Switch] You'll need to collect lots of flowers if you want to see everything that Crafted World has to offer.

BRIEF HISTORY

» Yoshi made his debut in Super Mario World but he soon began starring in his own games, with his most successful being Yoshi's Island (known as Super Mario World 2: Yoshi's Island in the west). Yoshi's Crafted World developer Good-Feel first worked on the series in 2015 with the release of Yoshi's Woolly World.

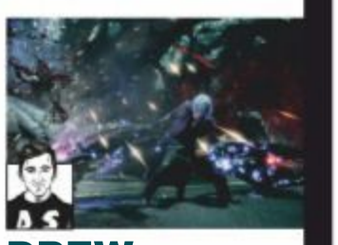
✱ PICKS OF THE MONTH



DAZ

Yoshi's Crafted World

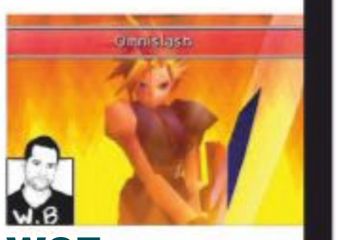
I simply can't get enough of Good-Feel's new game. It's cute, challenging and features lots of dinosaurs. What's not to love?



DREW

Devil May Cry 5

I'm in the minority that liked DmC, so I'm glad Hideaki Itsuno brought elements from it into the mainline series.



WOZ

Final Fantasy VII

Time to relive some Mako-fueled magic 20 years on. Here's hoping it won't take me a hundred hours this time round!

» [Switch] The stages where you have to catch Poochies are fun and add considerably to Crafted World's longevity.

Some of the flowers and other items are well hidden and you'll have to look hard at each area you visit as it's not always obvious where secrets lie. There's a constant sense of discovery with Crafted World that has been missing from the likes of Yoshi's Story and his numerous handheld adventures and it's a delight to see it well implemented here.

Collecting is important, too, as new areas are typically obstructed by a gatekeeper which needs a certain set of flowers before you can continue. Luckily, returning to levels is rarely a chore because a flipped version of each world exists where you must seek out three cute poochies that sneakily hide themselves away. You'll get a flower for each one found, as well as an additional bonus flower if you collect all three within a set time limit. It's a neat touch and ensures that previously completed levels still hold elements of surprise to them.

Another surprise about Crafted World is just how challenging it is. Sure, the first few stages are a deceptively easy breeze to walk through, but as Yoshi continues his quest for a bunch of special Dream Gems the difficulty ramps up sufficiently. If you thought Crafted World was a game for youngsters you may want to reconsider. That's not to say Crafted World is Dark Souls tough, but you'll need to have considerable skills if you plan to complete the later levels without losing any health along the way.

While we're discussing difficulty it's worth mentioning Crafted World's bosses. Kamek's crafted creations are slowly assembled piece-by-piece and then jump into action. They're a mixed bunch, too with some of them being callbacks to earlier mayors from the series, while others will test your skills and once again highlight Crafted World's challenge compared to more recent games in the series. We love how the attack patterns of each boss are every bit as creative as how they are assembled.

The inventive bosses and clever level design highlight the sheer level of competence that Good-Feel now has with the franchise, and it's abundant in the sheer variety of stages that the team has created for the lovable dinosaur. While many of the levels are fairly conventional platformers (albeit in an unconventional setting) Good-Feel has clearly been paying attention to the mainline Mario games as it's peppered its numerous worlds with fun diversions that range from riding along the backs of aeroplanes, to commandeering a gigantic cardboard Yoshi, to taking part in a high-speed race that requires you to stay in direct sunlight to power your vehicle. Good-Feel will rarely use the same idea more than once, meaning there's always that aforementioned discovery of stumbling across something new.

It may have taking nearly a quarter of a century, but Nintendo finally has a Yoshi game that captures the essence of Yoshi's Island and while it doesn't eclipse it, it's the best Yoshi game we've played since the original SNES classic. It might lack the creativity and inventiveness of Nintendo's best 3D Mario games, but Crafted World never ceases to delight. *

In a nutshell

In rebuilding Yoshi from the ground up, Good-Feel has discovered the magical formula that best mimics the original SNES hit. The end result is a highly entertaining platformer.

>> Score **85%**

» [Switch] Bosses get assembled out of parts before they start attacking you. It's a great effect.

*TWO CAN PLAY THAT GAME

» As with many of Nintendo's more recent platform games, Yoshi's Crafted World features its own multiplayer option, should you feel the need to tackle its lovingly designed stages with a friend. Unfortunately, it's nowhere near as entertaining as playing the game on your own. A lot of the issues come down to the fact that each Yoshi's egg trail gets rather distracting and it doesn't take long for the screen to become cluttered. The multiplayer mode certainly some nice ideas, like Yoshis being able to carry each other and joining forces to make more powerful stun attacks, but in general the whole exercise feels like something of a missed opportunity.

PICK OF THE MONTH

Devil May Cry 5

» **System:** PS4 (Tested), Xbox One, PC » **Buy it from:** Retail, online » **Buy it for:** £44.99

It's been more than a decade since we last saw the mainline Devil May Cry series, and in that time action games have changed a lot. RPG stats and levelling up are more or less the norm for the genre today, while FromSoftware's games are a genre unto themselves. Devil May Cry 5, however, sticks two fingers up to contemporary trends and sticks to what it knows best, and while the resulting effort feels quite safe, it also marks the greatest game in the franchise and an audacious return to form.

The main difference here from other Devil May Cry games is that you play as three characters throughout the story – Nero, Dante and newcomer V. Nero and Dante play similar to how they did in DMC4, with familiar combos and weapons making returns – although Nero now has a suite of new Devil Bringer arms, each with a unique ability. V is… interesting. He doesn't get his hands dirty himself, instead he has three demons he can summon and command from afar before delivering the coup de grâce on weakened foes himself. It's a novel idea, introducing a more strategic character into the fold, however V's sections are by far the weakest.

The story is nonsense. Much like an old John Carpenter music score, it serves as window dressing and repeats the same notes that have been echoing throughout the series since it began in 2001. That said, it plays host to one of the most well-earned F-bombs in videogames, so there's that.

Director Hideaki Itsuno wanted to prove that there still is a place for classic style character action games, and he's right. The combat in DMC5 is the star of the show, and it shines, slaying hellbeasts has never felt more satisfying, and making the battle theme's chorus drop once you achieve S style rank is a masterstroke of an idea.

DMC's return might lean on established ground a little too much, but it kind of needed to do so in order to make the point that it's a series which deserves to be alive today.

>> Score **85%**

» [PS4] One of Dante's new weapons is literally a motorbike that splits in two.

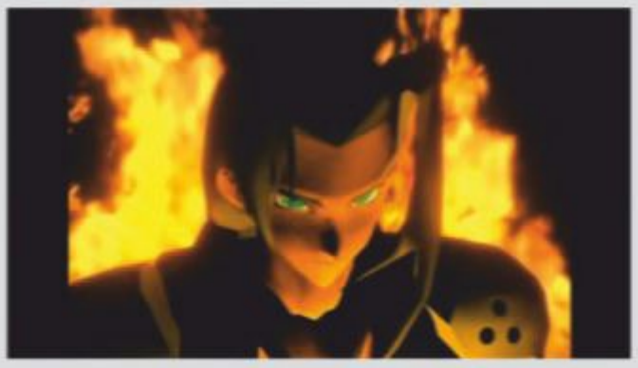
» [PS4] Nero has a range of new arms to play around with. Now where have we seen this before…

Phoenix Wright: Ace Attorney Trilogy

» **System:** Switch (Tested) PS4, Xbox One, PC
» **Buy it from:** Online » **Buy it for:** £29.99

Capcom's initial salvo of courtroom dramas are timeless, so it's always nice to see them reach a bigger audience. This collection is effectively a mildly enhanced version featuring redrawn art that is similar to the trilogy's release for mobile devices. Playing a visual novel confined to a big television isn't for everyone – and these games were designed to be experienced in a similar way you would a book – so if you were to dip in, we'd say go for the Switch version. That said, however, we encountered some significant battery drain when playing in handheld mode. One gameplay session that saw roughly half a case play out devoured 56 per cent of our console's battery.

>> Score **74%**



Final Fantasy VII

» **System:** Switch » **Buy it from:** eShop
» **Buy it for:** £12.79

Whilst PS4 players wait an eon for their remaster, Square is tempting Switch owners with this portable re-release of a classic. Nintendo finally gets the Final Fantasy it lost out on 20 years after Square famously jumped ship to Sony. Graphically this port follows suit of the Playstation Store release, one that retains the jaggy rendered backgrounds but generates the character models in a higher and therefore sharper resolution. Nevertheless, it plays well and suits the smaller screen of the Switch.

After all, it's the story where this shines, and taking the Avalanche gang on the battle against Sephiroth to save the planet still captivates today. A nice blast from the past, but a bit pricey, even if it will last upwards of a hundred hours.

>> Score **82%**

Sega Ages: Alex Kidd In Miracle World

» **System:** Switch » **Buy it from:** eShop
» **Buy it for:** £5.99

This recent addition to the Sega Ages range is further proof of why everyone is so excited about M2 being involved with the Mega Drive Mini. M2 could have simply released an accurate port of the Master System classic, but that would have been too easy. Of course, the studio's done that and the game is great fun, but it's also added a new version that adds brand-new cutscenes and a FM-based soundtrack, as well as the ability to switch between the International, Japanese and 'Hamburger' versions of the game, a host of wallpapers and filters, a music player and a ranking system. M2's games always go the extra mile and Alex Kidd In Miracle World is no different.

>> Score **80%**

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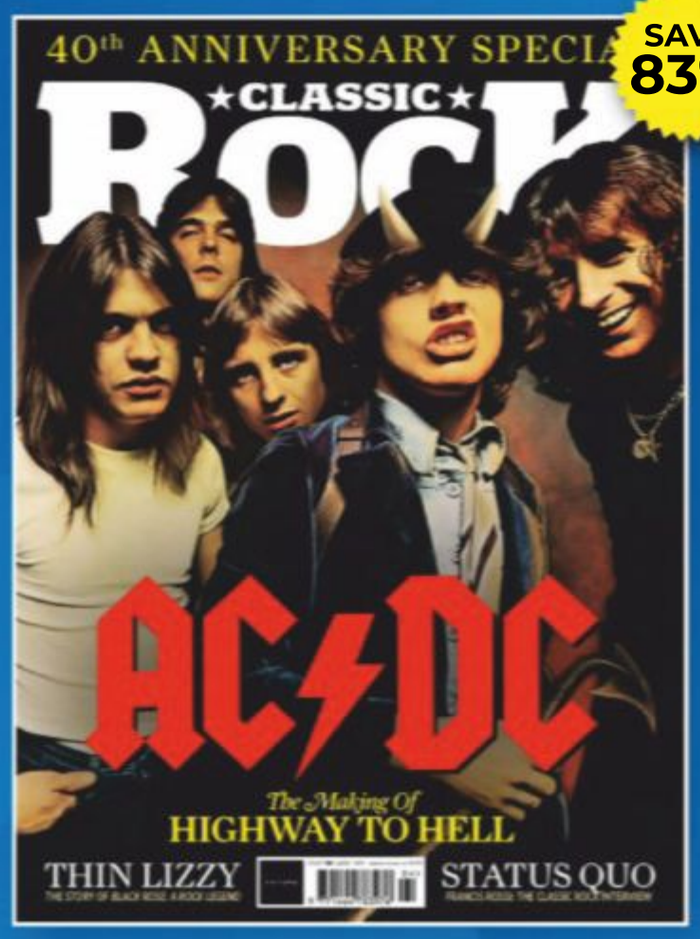

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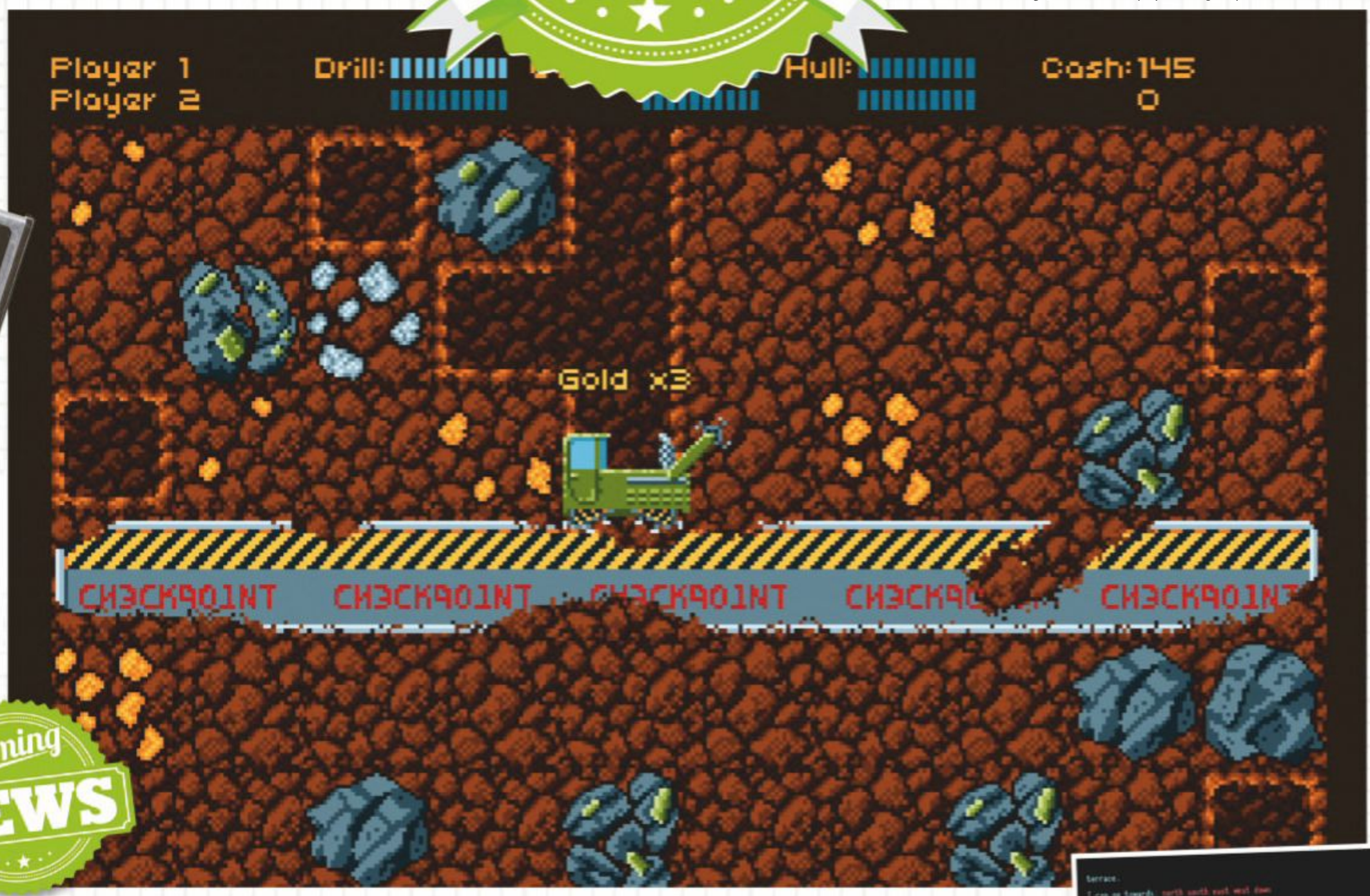


» [Amiga] AMIner wants players to dig deep in search of treasure.

Gaming NEWS

RACING AND DIGGING

There are just two days to the race but Emilia Vittorini is worried. Her father, one half of Industria Torinese Automobili, is abroad on business but something has gone very wrong and his brother – the other half of ITA – has just come home, slamming the door behind him. Emilia must figure out what's happened and how she can help her family in this text adventure. We've been playing the Commodore 128 of Two Days To The Race, but there are ports available for most of the other Commodore 8-bits, the Spectrum, MSDOS compatible systems and the Olivetti M20. More information and downloads can be found parked at Kikstart.me.uk/two-days.

We've covered a couple of the releases from 2018's iteration of the MSXdev but the deadline for entries officially passed in the middle of February and, along with the ten titles already submitted – including Gauntlet-inspired Virus LQP-79, colourful but challenging line drawing puzzler Linez and Gravitica, a scrolling shoot-'em-up where the player's craft has to bend space and time – another five slid across the line at the last minute. Two of those titles were in the 'freestyle' category which allows games which run on any MSX hardware including expansion, the most notable of which was Barbarian The Duel which sees sword-swinging heroes Thara and Bravos taking on an evil Arcomage in hack-and-slash action reminiscent of the Commodore 64 classic it shares part of a name with.

In the 'MSX Classic' category the newcomers were a top-down racer with called XRacing where the player must start from the bottom and make their way up to Formula 1, some Snake-inspired action in the form of PWND3 and Quartet, which was based on the flash game of the same name where the player constructs robot faces. Sadly, an announced conversion of Atari 8-bit classic Fort Apocalypse wasn't completed, which looked good and had the original developer's blessing, but the finished entries are available from Kikstart.me.uk/msxdev-2018.

Amiga fans may want to take a look at AMIner, where one or two diggers must tunnel into the earth in search of treasure. Players can either choose free play where the objective is just to fill the tanks with goodies, or go for the challenge mode and race against the scrolling. You'll find it buried over at Kikstart.me.uk/aminer-amiga.

terrace.
I can go towards: north south east west down
What shall I do?
You're in the hallway behind the main salon of villa Vittorini. There's a window and the place is lit by two gas lamps hung on the south wall. Between the lamps, there're two portraits of your grandparents. There're also two small bowls in a corner.
I notice
Bowsprite, a siamese cat
I can go towards: south east west up
The cat softly meows...
What shall I do?
> examine cat
He's your pet, a Siamese tabby cat and is very gentle. He is a relatively small cat, but with soft long hair.
The cat softly meows...
What shall I do?

» [C128] There's only Two Days To The Race but we're examining the cat.

» [MSX] A racing career off to a less than astounding start in XRacing.

NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at: **retrogamer@futurenet.com**

» [NES] Teetering on the brink of darkness... or just a wall in the cellar.

SNUFFLING AROUND

The gaming personality Dark Archon has somehow managed to get incredibly lost in his own cellar. Nobody else is around, so Grunio will need to step up; he might not seem the right creature for the job since he's a guinea pig, but this isn't his first heroic outing.

We gave Gruniozerca 2 on the NES a quick spin and it seems to be a colourful, platform-based puzzler with some delightful animation on Grunio himself and some interesting puzzles to solve. The game is free to download over at Kikstart.me.uk/gruniozerca-2-nes.

CRACKING STUFF

Dr Ludos has been busy recently and produced another small, fast-paced action game for the Mega Drive called Break An Egg, where eggs tumble from the sky and a chicken must try to headbutt them all into the safety of a basket because she doesn't have arms.

That's not an easy task, of course, because the first egg sets the basket moving and the game soon starts releasing more than one at a time. This is a simple but entertaining game to occupy a couple of spare minutes with. Kikstart.me.uk/break-egg-md will take you there.

» [Mega Drive] When two eggs arrive at once it's very easy to crack up.

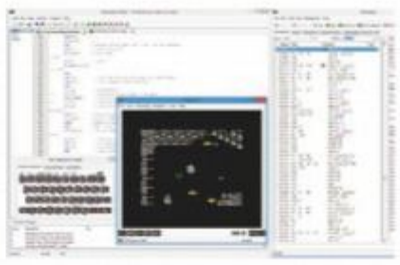
HOMEBREW HEROES

Andrew Beale's Spectrum game *Quadron* was written in the Eighties but only released recently at Kikstart.me.uk/quadron-spec. We approached him to chat about how that came to be

Where did the idea for Quadron originate from?
I'd always loved the early Williams arcade games with their fast and frantic gameplay, super smooth graphics, and those amazing particle effects. I wanted to create something on the Spectrum that incorporated elements of these classic games.

Roughly how long did it originally take to develop?
It took just over two years and was pretty much complete by early 1988. I was actually at university doing a computer science course during its development, but left to pursue game programming full time. I didn't regret it!

And what inspired you to get Quadron released?
Sadly, Quadron was cancelled by the publisher shortly before it was finished, and so it was always my hope to one day give it the release I thought it deserved – especially given the time and effort I put into it.

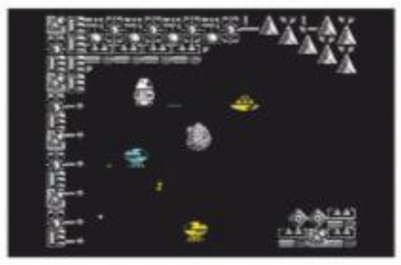


» [ZX Spectrum] Starting from code written in 1988 and producing a 2018 release.

I'd also recently become aware of the booming 8-bit retro scene, so I began the process of getting the game ready and with its 30th anniversary looming, it seemed the perfect time to do it!

How do current tools compare with what you used in the Eighties?
Much more robust! Being able to emulate the 48K Spectrum on a PC, single step through the program, and save snapshots is so much easier than developing on the machine itself. [...] Luckily I'd purchased a TR-DOS interface and disk drive in the later stages of development. That really helped speed up the development process.

What kind of feedback have you had so far?
It's been fantastic! Really encouraging. Players into Defender or Sinistar feel right at home with Quadron, and many have been surprised by the strategic elements of the game; it isn't just the arcade shooter it first appears. Another common reaction has been how the game feels like it was made in the Eighties rather than a product of present day construction tools like AGD. I definitely think game construction kit tools have their place for ease of development, but I like the fact that people have noticed the game's genuine retro roots!



» [ZX Spectrum] There's something handy, assuming the enemies don't get in the way.

Have you any other games in your back catalogue waiting for release or plans to start a new project?
I'm trying to locate some of my earlier, simpler games that were either rejected by publishers or just made for my own amusement. I plan to offer them for free alongside Quadron's paid download on Itch.io. Revisiting the Spectrum and Z80 programming after all this time has been really fun and my interest is definitely piqued regarding developing something new!

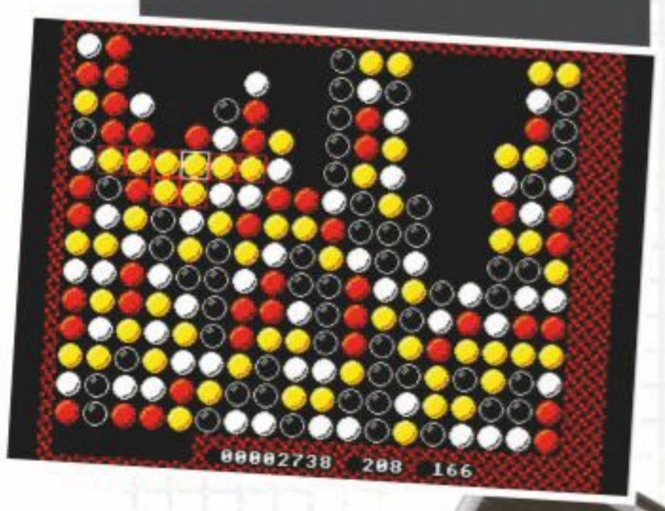
DO YOU REMEMBER?

Written in 2006 by Dominic Beesley, Ball Game for the BBC Micro has the player removing balls from an initially cluttered playfield with the ultimate aim being to clear it completely before the timer expires. Selecting a cluster of three or more spheroids will remove them from the screen, allowing the ones above to tumble downwards and earning the player some points and time.

If there aren't any groups available, a single ball can be removed but that costs some seconds off the clock so must be used sparingly or budgeted for near the end of a round. A large number of balls removed simultaneously will earn the player a powerful bomb that can blast the currently selected row and column when triggered but also steals some time. Head to Kikstart.me.uk/ball-game-bbc.

» [BBC Micro] Trying to choose the best order to remove clumps of colour is daunting.

» [BBC Micro] Precariously balanced spires of spheres, about to come tumbling down.



L'ABBAYE DES MORTS

» **PLATFORM:** COMMODORE 64 » **DEVELOPER:** ANTONIO SAVONA » **DOWNLOAD:** KIKSTART.ME.UK/LABBAYE-C64 » **PRICE:** FROM $7.99 FOR DOWNLOAD

» [C64] Once the door is unlocked, these gardens have a somewhat macabre theme.

» [C64] This is just one of the many evils within L'Abbaye Des Morts.

The 13th century wasn't a great one for the Cathars, a subset of the Catholic Church which was essentially expelled and then hunted down throughout the Languedoc region of France where its members had been based. Jean Raymond is one of the few surviving members of this rapidly dwindling religion and, as the story opens, he's being pursued through a forest. He's been running blindly and in fear of his life, but unexpected salvation of a sort is at hand, the relative safety of what appears to be a derelict abbey just up ahead beckons if he can reach it and bar the door before his pursuers catch up.

But Jean Raymond's asylum isn't all it appears to be so, although his pursuers are now stuck on the far side of the main door – an imposing slab of oak which resists their efforts to batter it down - he soon discovers that others have been here looking for sanctuary but didn't find it. Unbarring the main door would be certain death, so our hero must make the best of his current situation by gathering a quota of crosses left by previous visitors and hand-written notes either hinting at what must be done to survive or talking about the fate of those who came before.

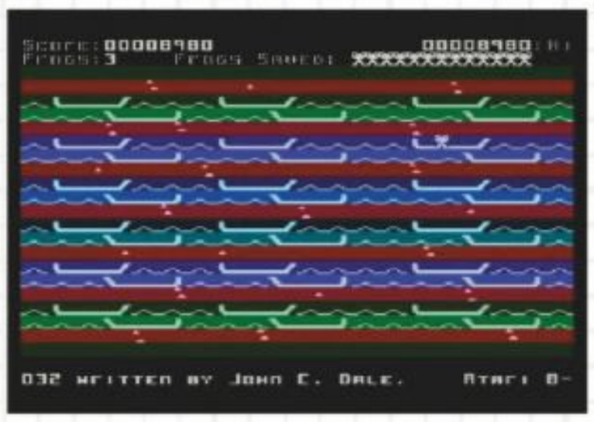
Foul creatures that must be avoided are constantly patrolling the abbey and its catacombs and, if Jean Raymond collides with them or lands in a spike pit, he'll be transported back to the last checkpoint cross and lose one of his lives which can be topped up again by collecting glowing hearts. Sturdy doors are there to keep intruders away from the building's deeper recesses but can be opened by levers.

L'Abbaye Des Morts started out as a Windows-based game from developer Locomalito which simulated the ZX Spectrum graphically, although it wasn't totally accurate so the subsequent conversion suffered from some colour clash. That wasn't a game-breaking issue at all but this Commodore 64 conversion doesn't share the issue so the Miner Willy-inspired action is a little easier to follow.

» Score **85%**

PET FROGGER

» **PLATFORM:** ATARI 8-BIT
» **DEVELOPER:** KEN JENNINGS » **PRICE:** FREE
» **DOWNLOAD:** KIKSTART.ME.UK/PET-FROGGER-A8

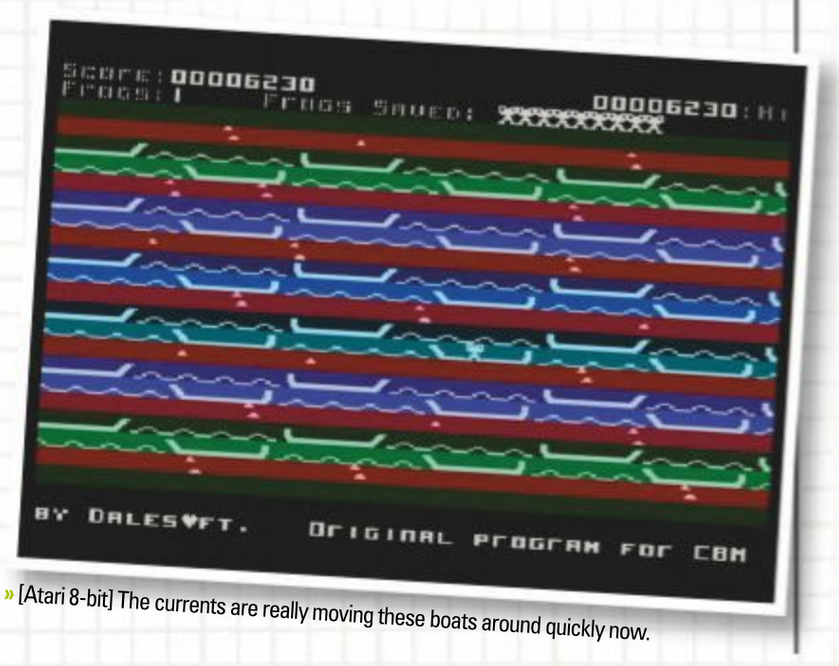


» [Atari 8-bit] "When I were a tadpole, all of this was hectic multi-lane motorways."

Pet Frogger started life on the Commodore PET in 1983 and is a somewhat unusual choice of game to port to the Atari 8-bit. The title makes it fairly obvious which game was the inspiration, but most of the features weren't implemented, and the player's amphibian avatar therefore doesn't have to deal with hazards like oncoming traffic, diving turtles, a pressing time limit or even lining up the final jump to a lily pad.

Instead, the only objective is to leap between passing boats and the strips of shore between them until the frog reaches safety and the only challenge after that is the player being unable to move downwards, although this only becomes an issue at the edges of the play area when the action speeds up on later stages. There's some neat, Atari-style presentation here but it's wrapped around uninspired gameplay that soon becomes either too fast or repetitive.

» Score **46%**



» [Atari 8-bit] The currents are really moving these boats around quickly now.

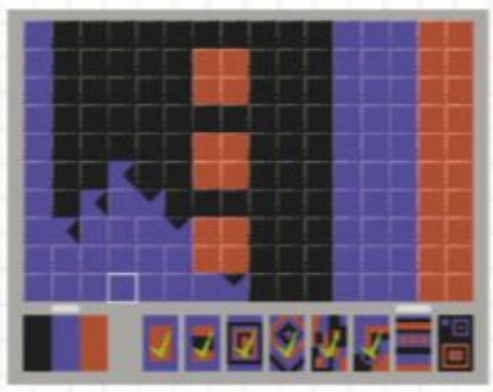
KAMI

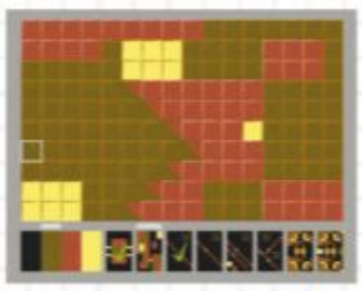
» **PLATFORM:** COMMODORE 64
» **DEVELOPER:** DNP » **PRICE:** FREE
» **DOWNLOAD:** KIKSTART.ME.UK/KAMI-C64

There isn't a world-saving storyline to worry about with Kami, instead it's a no-nonsense puzzler where the player must make all of the on-screen tiles match. This is done by selecting a colour and clicking on a tile, which causes it and any similarly hued ones touching it – and their neighbours in turn – to transform accordingly. Clearing each area is therefore easy, but doing so in the optimal number of moves is required to properly complete a stage and earn a green tick on its icon.

Like all good puzzles games, the early stages are there to both act as a training ground and lure players into a false sense of security, but it doesn't take long to find more devious, thought-provoking challenges even in the first block of eight and there's a total of 40 stages which can be attempted in any order.

» Score **82%**





» [C64] Just adding a spot of brown. Well okay, a huge dollop of brown.

ROUNDUP

Coming soon to the Amiga is a conversion of Rygar which is targeting AGA-equipped machines with the intention being to keep as close to Tecmo's coin-op original as possible. The legendary warrior rises from the dead to free the denizens of Argool using his Diskarmor and whatever weapons fate may provide along the way. There's discussion and playable previews in the EAB thread behind Kikstart.me.uk/rygar-amiga.

Sticking with the Amiga, we've played a preview of All Valley Karate Championship which is a one-on-one beat-'em-up based on the tournament featured at the end of The Karate Kid. All of the characters may have been drawn in a cutesy style, but the actual contests are challenging. The fighting starts at Kikstart.me.uk/all-valley-amiga.

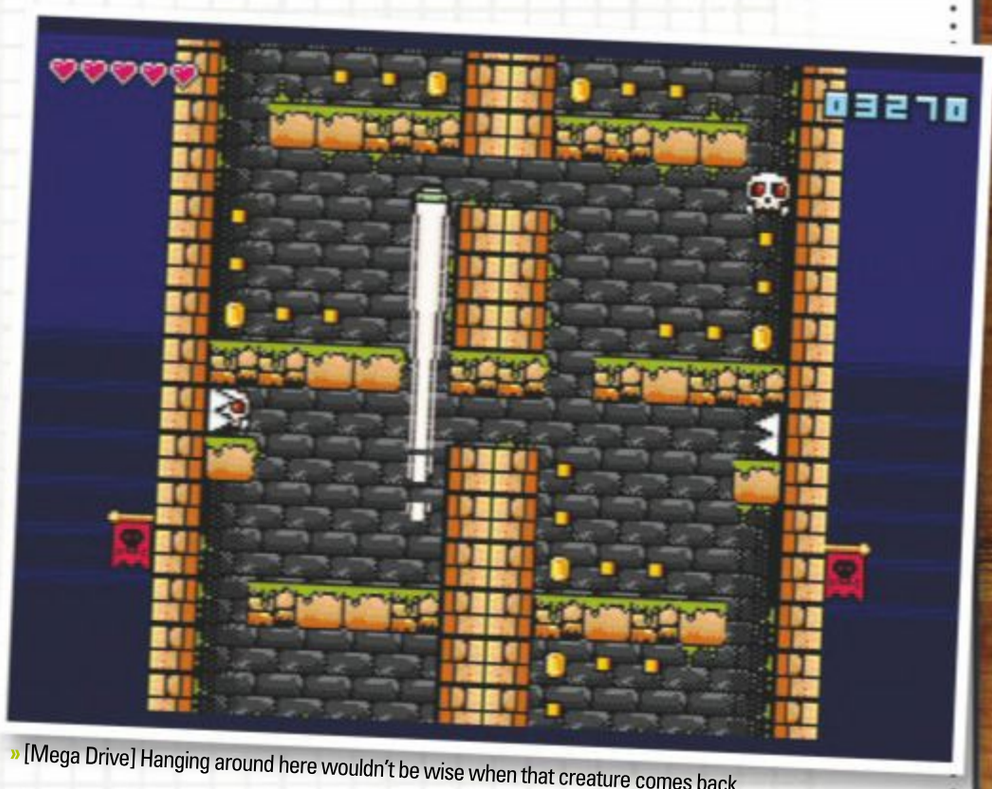
OLD TOWERS

» **PLATFORM:** MEGA DRIVE » **DEVELOPER:** RETROSOULS » **DOWNLOAD:** KIKSTART.ME.UK/OLD-TOWERS-MD » **PRICE:** VARIES

The ominous-sounding Old Towers are stacked to the brim with riches just there for the taking, but there's a plethora of creatures and environment-based traps defending them as well. Entering each tower seals the exits until all of the goodies have been collected and once the players delightful little avatars – there are sometimes two in play, which can be toggled with the A button – start moving they're very quick and won't stop again unless they collide with something that's hopefully not fatal.

As with the Spectrum original, this is a fast-paced and often devious puzzle game, but in a good way. There are places where a leap of faith is necessary due to the larger in-game graphics so trial-and-error experimentation is needed to work around these parts of the map, but each stage brings a feeling of accomplishment when it has been completed.

» Score **88%**



» [Mega Drive] Hanging around here wouldn't be wise when that creature comes back.

DIFFICULTY

●○○○○

LOW

FORMAT

» VARIOUS

HANDY HINTS

» It pays to be connected – giveaways can last as little as 24 hours, so it's worth following stores and publishers on social media, signing up to their email newsletters and checking them regularly.

» Freebies and digital deals will require you to embrace modern hardware, but they're worth it. For example, the cost of a used PS3 and a digital copy of *Harmful Park* is far less than an original copy of the PlayStation game.

FANTASTIC FREEBIES

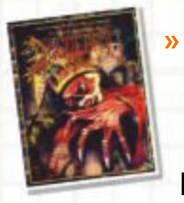
If you're looking for something to play right now and don't want to pay a penny, try one of these classic PC games – they're available on a long-term basis and completely legal.

» **StarCraft**
starcraft.com

You can buy this evergreen RTS in its remastered form, but the original version is completely free.

» **Beneath A Steel Sky**
gog.com/game/beneath_a_steel_sky

If you're after a classic point-and-click, look no further. You'll even get wallpapers and the original comic as extras.



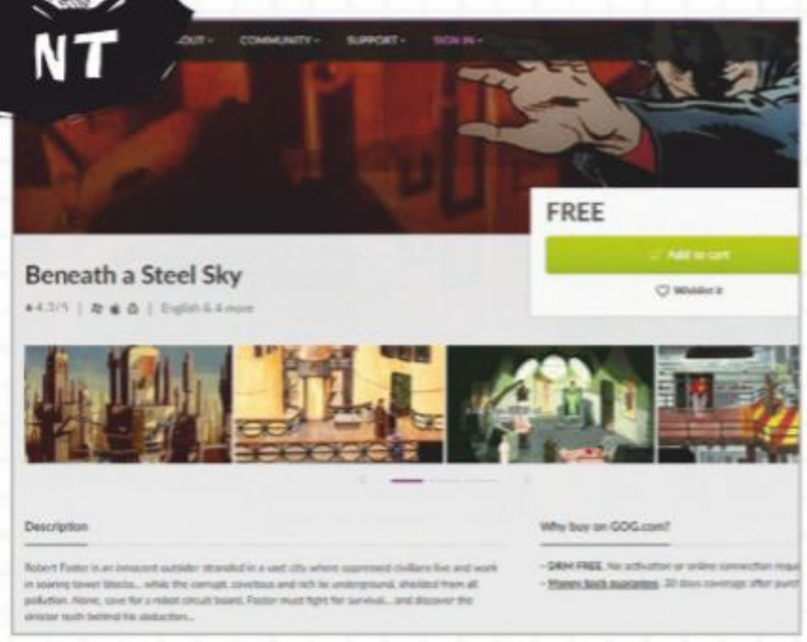
» **The Elder Scrolls: Daggerfall**
elderscrolls.bethesda.net/en/daggerfall

If you fancy an old-school trek to Tamriel, this RPG is the game for you. *The Elder Scrolls: Arena* is also available.

HOW TO...

SAVE MONEY BY GOING DIGITAL

Let's face it – retro gaming isn't the cheap option it once was. But if you're strapped for cash and not fixated on physical media, there are some surprisingly easy ways to experience some retro fun for less

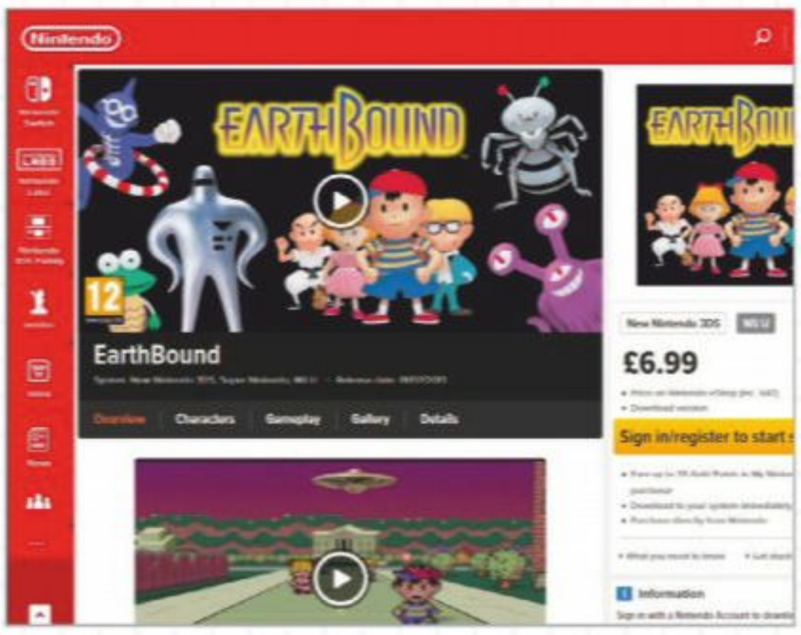


01 Keep your eyes out for time-limited giveaways. PC games in particular are given away for free surprisingly often – the Epic Games Store offers free games every two weeks, and Humble Store and GOG both run occasional promotions. Console freebies are less frequent, but they do pop up occasionally – especially if you're a subscriber to their online services.

03 If you've got a bit of money to spare, the Humble Bundles occasionally deliver lots of retro or retro-themed games for as little as a single American dollar. These are commonly grouped by platform, publisher or genre. They're not always just PC games, either – Sony and Nintendo systems occasionally receive bundles, as do mobile platforms.

02 Some games have also been made available for free on an ongoing basis. These are much less common than the limited giveaways, but they're easily found via some search engine detective work. You should look beyond the PC, too – Sega offers a variety of Mega Drive games for free on mobile devices supporting iOS and Android.

04 Console digital stores can be a great source of otherwise expensive games, some of which are imports. Earthbound will set you back less than £10 on New 3DS or Wii U, compared to well over £100 for a loose SNES cartridge. Make sure to get yourself set up with accounts in all regions to broaden your choices.



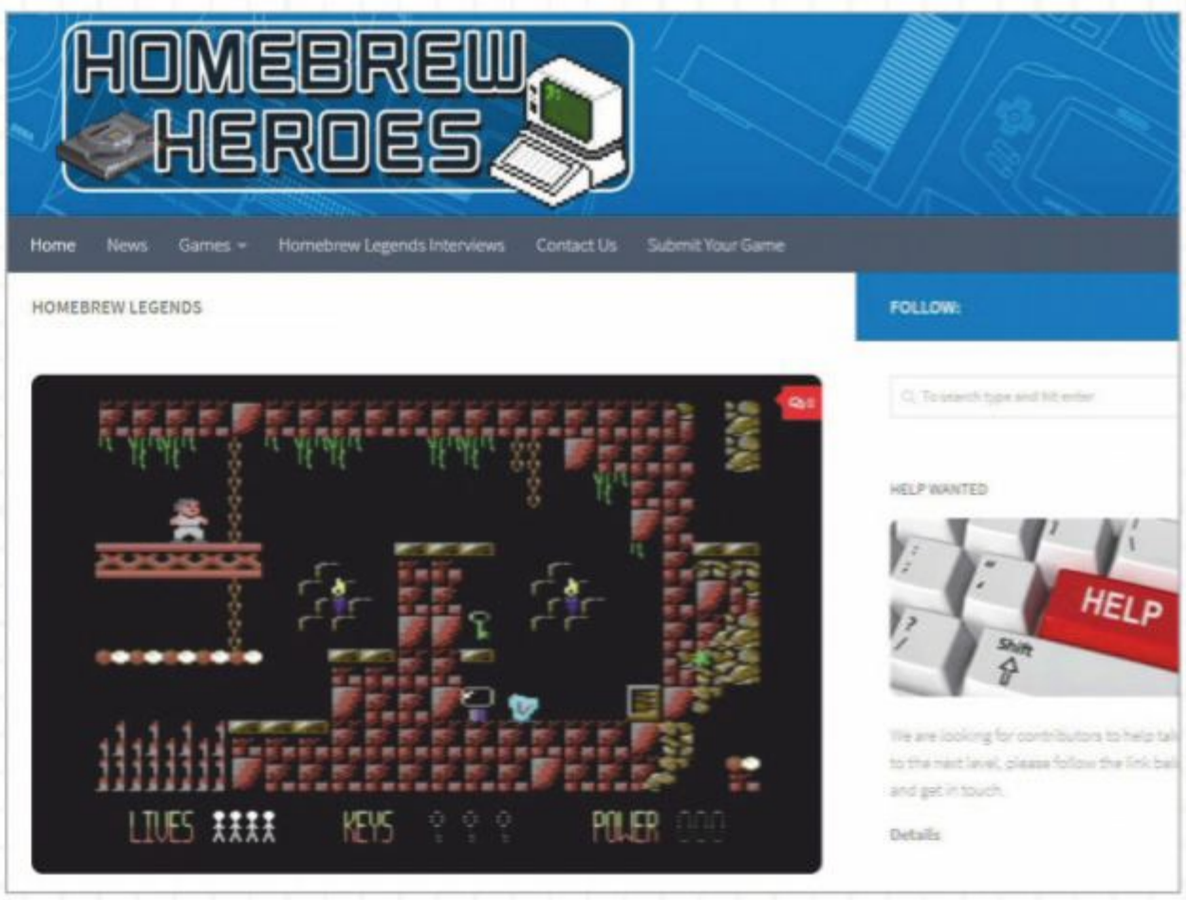
Something you'd like to see a guide for? Contact us at:
RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

WHAT'S NEXT?

Q: Is there anything else coming that might help?
A: There sure is – if you want to maximise game availability with a low monthly budget, a subscription service might be just the deal you're looking for. For example, Origin Access on PC offers games like the Command & Conquer, Ultima and Wing Commander games, and the Nintendo Switch Online service offers access to NES games. There's also a service called Antstream on the way, which promises streaming retro games across a variety of devices. Check these out and see if they're right for you.

Q: But what if I prefer physical editions of games?
A: We also feel that way, and we think physical games have many advantages. But the best deals today are often found digitally. Even if you don't consider digital games part of your collection, just think of them as an extended rental that you can use when deciding which physical purchases to make.

"Many new games for classic systems are made every year, and plenty of them can be had for low prices"



05 Don't forget to explore the homebrew scene – many new games for classic systems are made every year, and plenty of them can be had for low prices or even no cost at all. You can even play them on real hardware with the appropriate accessories. If you want to know where to find them, check out our homebrew section.

YOUR QUESTIONS ANSWERED...

A selection of smaller questions from readers...

CROSS STREAMS

Is it safe to use a Saitek Megagrip IV MX241 Joystick that says for Mega Drive with a C64? I don't want to try it in case I blow my Commodore SX-64 up!
Ian Learmonth via email

Many readers might be surprised to find that the answer to this is that it isn't 100 per cent safe. Although the controller is pin-compatible, the electrical behaviour is different and can stress the C64 hardware if the keyboard and controller are operated at the same time. Issue five of Commodore World provided a wiring diagram for readers to build their own adaptors in order to make Sega controllers safe to use, so the problem has been known for at least 25 years – visit bit.ly/C64SegaWiring if you'd like to see that and try it for yourself. However that's an unnecessary step today, as there are premade adaptors out there if you'd prefer to buy one.

MAG BLAG

What are the legal ways to download/view historic gaming magazines? (Mean Machines, Amiga Power, Nintendo Power UK etc)?
Michael Gulliver via Twitter

If a copyright holder has explicitly released those magazines into the public domain or provided official downloads of archive content, you're golden. If not, your options are limited to buying your own copy, borrowing a friend's copy, or finding a library or museum stocked with original copies.

EMULATION NATION

Why do people hold such elitist attitudes towards people who choose to emulate games?
Rob via Twitter

Emulation is something that has been embraced by many original game devs as a legitimate way of enjoying their games, so the rejection of emulation of any quality by certain retro gamers is a mystery. While there is a ritualistic pleasure we derive from slotting a cartridge into a SNES, are we any better than someone enjoying the same game on their Wii or their SNES Mini? No, but some people convince themselves that they are to justify their own expensive purchases. Nick finds that being single allows him plenty of time in 'The Ivory Tower' (which is what he affectionately calls his flat), which he uses to extensively document the differences between games running on original hardware and their emulated counterparts. You may feel that this is the behaviour of a rather irritating hipster, as we often do during the extended presentations of his findings that he holds during our lunch breaks.

COLLECTOR'S CORNER

READERS TAKE US THROUGH **THE RETRO KEYHOLE**

AMIGA 500

"This rather nice machine came complete with a rather lovely Philips CM8833-II monitor."

PAID: £25

MATTEL AQUARIUS

"I got this complete in box with a bunch of accessories and games."

PAID: £60

BIO

NAME:
Neil Thomas

FAVOURITE GAME:
Ultima 7: The Black Gate

FAVOURITE SYSTEM:
Commodore Amiga

ESTIMATED VALUE:
Priceless to me

YOUTUBE:
youtube.com/retromancave

CAVE OF WONDERS

Neil Thomas talks us through his eclectic collection

If you're a regular visitor to YouTube you'll probably recognise this month's collector as he hosts the popular RetroManCave channel. While we will focus on Neil's impressive video content in another issue, it's worth mentioning as his unusual collection of hardware is regularly featured on the show.

"I first started collecting in the late Nineties with an interest in systems I'd missed first time around," Neil tells us. "Arcades were losing popularity and living in the seaside town of Bournemouth at the time meant I was able to find a JAMMA arcade cabinet for £50 using a Yellow Pages which I duly converted into a MAME arcade. I really enjoyed exploring a catalogue of arcade games I otherwise wouldn't have been able to access, and I think the thirst to repeat this process of discovery with other consoles and micros grew from there."

As a result Neil's interest largely started to move across to systems from all around the world, from the humble ZX Spectrum to obscure rarities like the LaserActive (which you can find on page 88 of this issue). "Every computer has a fascinating story to tell about its designers, the battle for market share with its competitors, technical leaps and system crippling cost cutting decisions," explains Neil when we ask about his interest in collecting gaming machines. "Understanding the hardware is a fun way to really understand the stories behind the machines and I often incorporate repairing broken machines into the storytelling process when making YouTube videos. Repairing broken systems also makes the hobby much more affordable, and of course the reward when you've restored a system is a new library of games to dive into."

And Neil does have some impressive collections to dive into and has a particular interest in the 8-bit era. "Well 8-bit gaming was the Wild West in system design, they all took a different approach and each system's library has a distinctive character as a result. This feeling of character is now eroding as modern consoles steer towards a common platform. Far from being an exotic system I am enjoying the Commodore 64 library currently as I had access to ZX Spectrums and Amstrads in this era so it's great fun catching up on old and new releases for the platform. I'm also fixing up a Dragon 32 with a box of games to explore but I'm not holding my breath for many stand out titles with this one, everything is very green."

Anyone who has watched Neil's RetroManCave show will also know that he's fond of the Amiga and PC and has many large big box versions of his favourite games, as well as framed art of classics like The Secret Of Monkey Island. For Neil it would appear that the presentation is just as special as the game. "Big box games are works of art in their own right," he admits. "They're tangible, honest treasure troves of gaming joy which won't vanish from your

Got an impressive collection of your own? Contact us at:

RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

486 PC

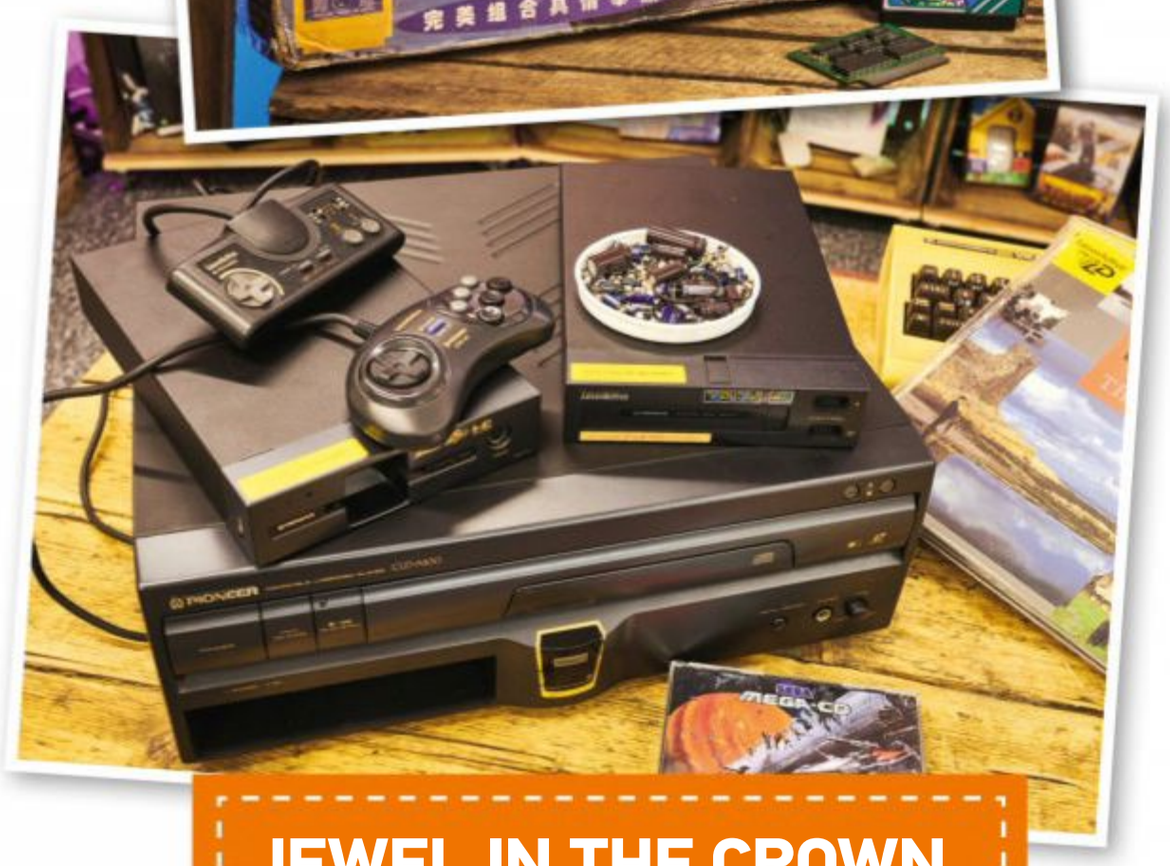
"I found this in a skip. It's now refurbished and used as a gaming PC."

PAID: £0

PC ENGINE WITH CDROM SYSTEM

"This was donated by Cave Dweller Chrissy and is awaiting repairs."

PAID: £0



"Understanding the hardware is a fun way to really understand the stories behind the machines"

Niel Thomas

shelf because an online service has been retired. The best are filled with novellas and maps which expand on the games universe and keep you engrossed even when away from the screen. LucasArts, Sierra and Origin titles are especially good at this, and flight sims take it to whole new levels with huge tomes which make you feel like you could join the Air Force after reading them. It was a sad day when PC gaming turned to DVD-style cases."

For all his interest in videogames, it's the systems that constantly catch your eye when you trawl through Neil's channel and he's been lucky to acquire some directly from viewers. "I'm very fortunate to receive donations from viewers who want their treasured tech to go to a good home," he beams. "I do my best to restore and share them on videos and with visitors to The Cave. Some of my favourite donations include the Jackie Chan-endorsed Famiclone, an Amstrad CPC 464 which was my first computer and ZX Spectrum clones from the former USSR which took me down a fascinating rabbit hole of computer history from behind the iron curtain."

Before we leave Neil's Cave it's probably worth mentioning the strangest item he has there… a rather unusual joystick. "All hail Trevor!" Neil laughs. "He started life as a Cheetah Tortoise joystick review, but has since become something of a mascot for the channel. He'll have a chat with you on my Discord server if you pop in but be warned, he isn't the most polite of tortoises."

JEWEL IN THE CROWN

PIONEER LASERACTIVE WITH MEGA DRIVE MODULE

"I imported this in a nonworking condition for £200 from Japan. It was a gamble, but after a mammoth capacitor replacement session it came to life and now I can enjoy the strange world of Mega Drive games on LaserDisc."

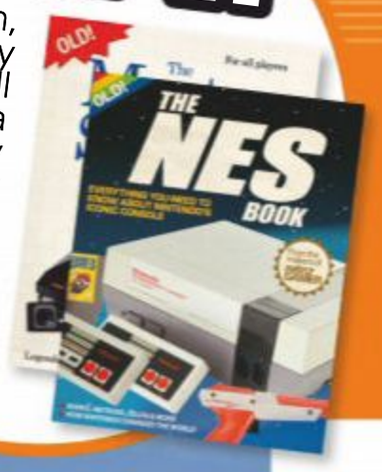
PAID: £200

MAILBAG

HAVE YOUR SAY... SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

WIN!

Every month, one lucky writer-in will receive a spanking copy of either our NES/Master System or SNES/Mega Drive books



STAR LETTER

WHAT IS A GAME?

Dear **Retro Gamer**,
What makes a game a game? I collect a fair amount of retro games and it always amazes me how much money can exchange hands for retro games. One thing bothers me, though: I play all the games I buy, so in essence I know they work and can be classed as what they are and hence have a value. Some games are unopened sealed copies. But nobody knows if they work at all? So where is the value? It's just a piece of plastic with a circuit board in it. It only gains its value when its used for what it was purposed for, right? Or am I wrong? If I'm right why are they so expensive. If I'm wrong, please explain.
Keep up the good work.
Tony Pendred

That's a great question, and the answer will change depending on the person. Simply collecting games is as big a deal to some as actually playing them and when you start tumbling down that rabbit hole it's difficult to know where to stop. Personally, we prefer playing games to keeping them sealed – although Darran does have a fair few sealed Limited Run Games that he hasn't gotten around to playing yet – but we can understand the appeal of wanting pristine copies of your favourite games for aesthetic use only. Ultimately, it comes down to what you want from your hobby. Expect a feature on the many types of collectors in an incoming issue. In the meantime enjoy a free book.

» It's amazing how much value plastic adds to the cost of a game. Blast Wind is expensive enough, but silly money is asked for sealed copies.

» [SNES] If mind wiping was a thing we'd do it to experience Super Metroid all over again.

METROID REVELATIONS

Hi guys. Love the mag.
I agree entirely with the Retro Revival on Super Metroid. I remember playing the excellent Turrican II and someone said it was a bit like Metroid but the relevance was lost on me at the time. I then bought Metroid Prime on the GameCube, which was very good but not life changing. Then I bought a SNES Mini and Super Metroid was the first game I tried out. Wow, what would I have thought of this game back in the day? The structured way you keep getting upgrades is brilliant and just when you are ready for giving up the game gives you something back, it's just wonderful.
Darren
Grange Over Sands

» [PC] Being able to relive history battles with Total War would certainly make history lessons more interesting.

We're glad you've enjoyed Super Metroid, Darren. It's not only one of the best games in the franchise, but remains one of the best adventures on SNES. It's a shame you didn't gel with Prime, though as that's really special, too.

WAR IS INFORMATIVE

Dear Darran
What a wonderful and thoughtful article, The History Of Total War, proved to be in issue 191 of **Retro Gamer** magazine!

I believe this long-running series has been fundamental in bringing many new people to the strategy game genre who normally would not give it a second glance. Certainly branching out into the Warhammer universe will only increase the appeal of the franchise, as did the television series Time Commanders before it. I hope for more episodes soon.

Had he still been alive today, I am sure my old history teacher Mr Day, an irrepressible Welshman, would have pushed for these games to be included in the school curriculum!
Yours sincerely
Stuart Hardy

We're glad you enjoyed the article Stuart. The Total War series really has gone from strength to strength in recent years, and it's impressive how it continues to evolve and find new audiences.

IT'S A DATE

Dear **Retro Gamer**,
I would like to know if it would be possible for me to get information on the on sale dates for **Retro Gamer** magazine. I have tried looking it up but have not found any answers. Would it be possible to have a list of the dates provided to me so I know when I can buy the next issues? I have just recently took an interest in the magazine so I am unaware of any schedule that there is if there is one.
Cheers,
Liam Carr

Thanks for getting in touch Liam. Darran's repeatedly pitched Retro Gamer T-shirts with the dates on the back (like you get with tour T-shirts). We don't actually have this information available, other than on the next month page. We'll see if we can change this in the future.

» Each issue's next month page is the best place to find out what we're planning for the following month.

Don't forget to follow us online for all the latest retro updates

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CONTACT US

Snail Mail: Retro Gamer, Future Publishing, Richmond House, 33 Richmond Hill, Bournemouth, Dorset, BH2 6EZ

Email: retrogamer@futurenet.com

NAME THAT GAME

Dear **Retro Gamer**,

Please can you name this game for me that I used to play as a youngster? It was a shooting game from the arcades and featured some really bright colourful levels and strange bosses. I distinctly remember one level with ladies taking baths and another where you shot an animal in its testicles. Please tell me this wasn't some mad surreal dream I had.

Yours hopefully,

Paul Baker

Do not worry Paul, we're well aware of the game in question and it's because Darran's recently completed it on his Sega Saturn. The game is Sexy Parodius and it's the fifth instalment of Konami's unique shooter series.

» [Saturn] Sexy Parodius does make quite the impression. It's not every game where something like this happens.

OBJECTION!

Dear **Retro Gamer**,

Please, please, please could you run an article on the Phoenix Wright series of videogames. While it came out in the west on DS it actually started off life on Nintendo's Game Boy Advance, so I feel that it's old enough to appear in the magazine. The original trilogy has a fantastic selection of characters and some of the cases are extremely clever. In fact, the fourth case on Phoenix Wright was probably one of the best DS experiences I had at that point. If you don't mind me suggesting it, you could also look at the later games in the series as well and there's even a crossover with Professor Layton that every fan of the series should play. Please, please, please make this happen. As a new reader it would make my year.

Regards,

Stuart Chambers

You clearly have an excellent taste in games Stuart. While we don't currently have plans to run anything on the series we did cover a making of the first game in issue 176. As luck would have it we've also reviewed the trilogy this issue.

DISCUSSED THIS MONTH

London Gaming Market

Last month Darran decided to visit the annual London Gaming Market to sell some wares. Traveling up with freelancer John Sczcepaniak he sold nearly 200 games and also picked up some sweet Saturn imports. It was a long day, but a fun one and it was great to meet the readers who stopped by to say hello.

» [Switch] Capcom's series is so popular that it's nearly sold 7 million units. That's a lot of objections!

Your say

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know…

What's your favourite Mortal Kombat character?

Dan Pillar
It has to be Sub-Zero for me, as I can pick up any version of *Mortal Kombat* and actually do some of his moves.

Elgin_McQueen
Sub-Zero. Easy to perform his moves, and he had a cool blue outfit. Get Over Here!!!

@ShakeZulaMic
Quan Chi. He's the ultimate troll and badass sorcerer. Also he shoots green skulls out of his face and can control the strongest undead warriors.

Michel Russell
I always liked Kitana. Catch someone with her fan lift and you could do some fun juggles.

@DelitionHikari
I'm sad that no one said Ermac. He's been my main character in all of the games he's been available in. When he's not available, I'll usually go with Sub-Zero.

RetroBob
Scorpion, as he's the only character I can remember the moves for!

Alex Doran
Raiden! Mostly for that cool side art from the Mortal *Kombat II* arcade cabinet

@KoriMaru
Johnny Cage, because not only he's pretty with cool green energy moves, but sheds light when danger is near by and he isn't afraid to die!

» [Arcade] The core characters of Mortal Kombat still remain extremely popular.

Phil Gower
Scorpion has always been my favourite character. I have a tattoo on my arm of him

Extraprawns
Scorpion hands down. "Get over here" is the most remorable line from all the characters. And his flame skull fatality is so metal!

antsbull
Raiden, as he was inspired by one of all-time favourite movies, *Big Trouble In Little China*!

Adam Vaile
Kano was the first character I ever selected when I first played *Mortal Kombat* in the arcades due to his likenesses as the T-800 due to his eye plate.

retro GAMER

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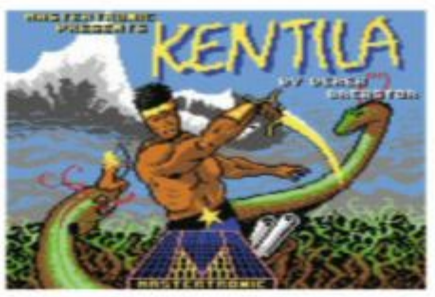

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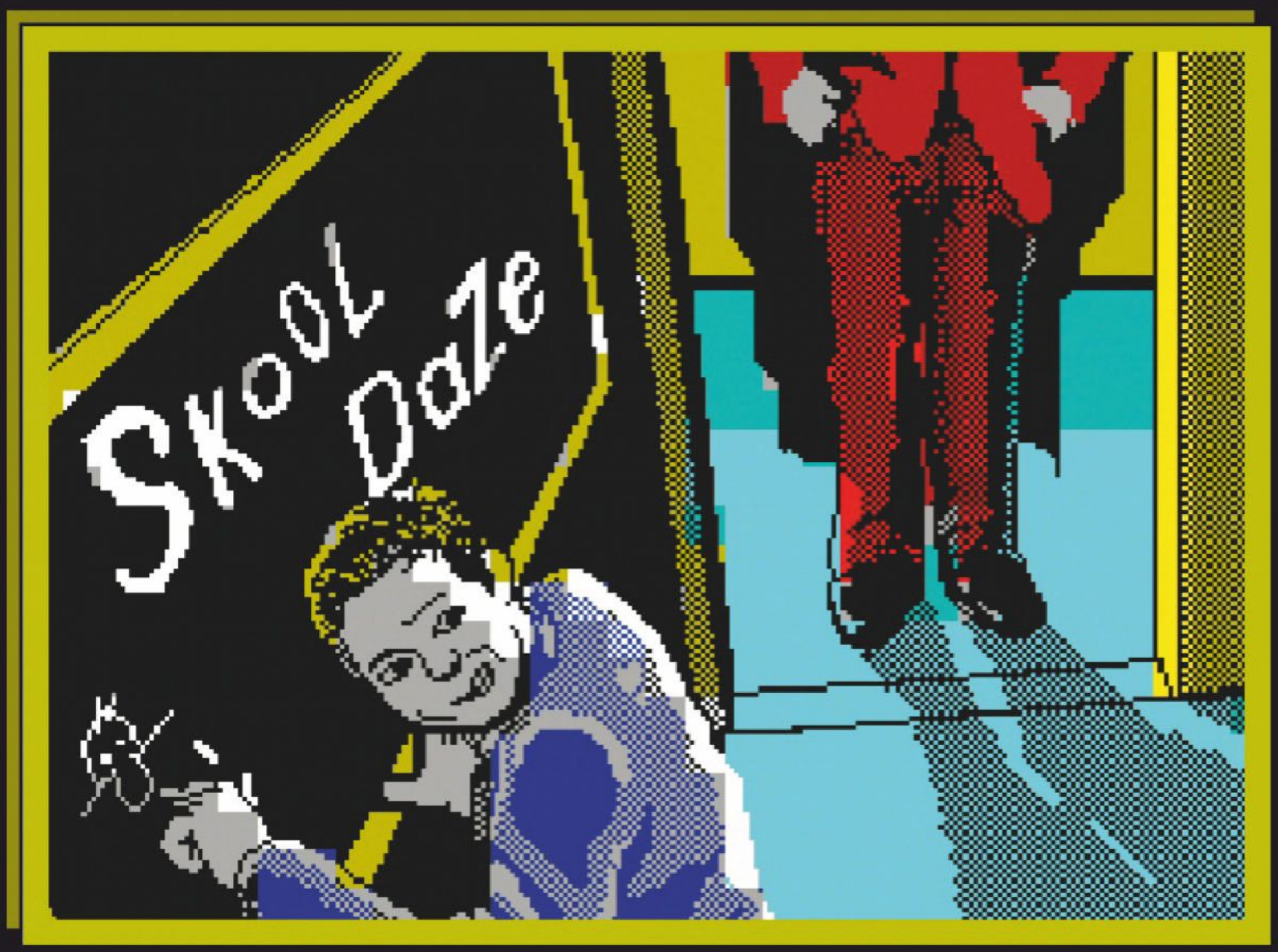

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ENDGAME

SNK GALS' FIGHTERS

» Many years before SNK Heroines and its newcomer-friendly approach to fighting games, SNK Gals' Fighters was enjoyed by the hardest of the hardcore – Neo-Geo Pocket Color owners who had already exhausted the multitude of other fighters on the platform. One major mystery caused these hardy souls uncountable sleepless nights. Just who is the enigmatic Miss X? Let's see if the game's ending sheds light on this mystery

01

» Miss X crashes onto the scene, riding a moped like the badass she is. She's wearing a long-skirted school uniform that signifies her status as a sukeban, the leader of a delinquent girl gang. Clearly, she's not to be messed with.

02

» Miss X begins by remarking on your fighting prowess, noting how you've beaten the game's whole roster – an extensive cast, totalling a whopping ten fierce fighters. This is a achievement that any player would be proud of.

03

» Yes! We're finally going to get to learn the true identity of this warrior. Who shot Mr Burns? Who ran over Stone Cold Steve Austin? What happened to Tony in the finale of *The Sopranos*? All trifling matters by comparison.

04

» Ramping up the tension, Miss X prepares a self introduction. Who could it possibly be? While many of the game's other characters have suggested that she's just Iori Yagami in an unconvincing disguise, we know that this can't possibly be true. That'd be a massive cop out that nobody would accept.

05

» But wait, what's this? SNK has only budgeted for three screens of text? Oh no, the screen is fading to black – quick, Miss X! Reveal your identity before it's too late! No, don't argue with the director, that'll just use even more text! If only the screen resolution were higher...

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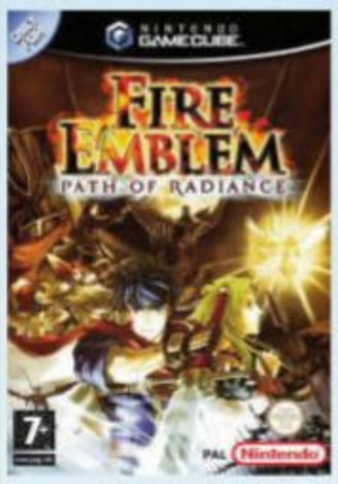

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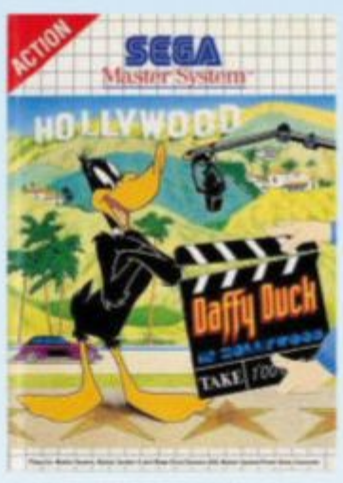

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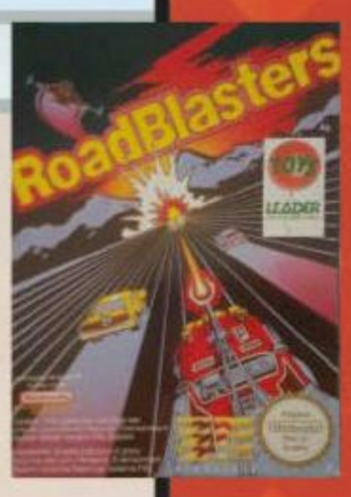

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